



LiPOLY[®]
SHIU LI TECHNOLOGY CO.,LTD

旭立科技股份有限公司

**PROFESSIONAL TIM
MANUFACTURER**

THERMAL INTERFACE MATERIALS



SHIU LI TECHNOLOGY

Founded in 2005, Shiu Li Technology has established itself as a leading thermal management manufacturer, developing high-performance thermal solutions for product designers around the globe.

For nearly 20 years, Shiu Li Technology has supplied some of the largest technology brands in the world with its brand of LiPOLY thermal interface materials.

INNOVATIVE THERMAL SOLUTIONS

LiPOLY materials have been designed into hundreds of applications for some of the largest electronic companies in the world. We listen to our customers' needs and develop thermal solutions that meet our customers' specific design requirements.

Our customers come to us because LiPOLY deliver innovative and reliable thermal interface solutions.



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LIPOLY
旭立科技

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T-top81-s

High Thermal Conductive Gap Filler

LiPOLY T-top81-s offers outstanding thermal conductivity at 8.0 W/m*K and extremely low thermal resistance under minimal force.

T-top81-s offers excellent compression, filling small air gaps on uneven surfaces, ensuring an efficient and consistent transfer of heat.

■ FEATURES

- / Thermal conductivity: 8.0 W/m*K
- / High compression rate
- / Extremely low thermal impedance

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Flat-panel displays
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / 5G base station & infrastructure
- / EV electric vehicle



■ CONSTRUCTION

Series	Characteristics	Configurations
T-top81-s	Silicone compound with weak sticky surfaces.	Sheets form, Die-cuts parts

■ TYPICAL PROPERTIES

PROPERTY	T-top81-s	TEST METHOD	UNIT
Color	Purple	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.4	ASTM D792	g/cm ³
Hardness	35	ASTM D2240	Shore OO
TML	<0.1	By LiPOLY	%
Application temperature	-60~150	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION			
Deflection @10 psi	7	ASTM D5470 modify	%
Deflection @20 psi	20	ASTM D5470 modify	%
Deflection @30 psi	43	ASTM D5470 modify	%
Deflection @40 psi	64	ASTM D5470 modify	%
Deflection @50 psi	68	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
Dielectric constant@10MHz D _k	10.2	ASTM D150	-
Dielectric constant@1GHz D _k	10.1	ASTM D150	-
Dielectric constant@1.8GHz D _k	10.8	ASTM D150	-
Dielectric factor@10MHz D _f	0.006	ASTM D150	-
Dielectric factor@1GHz D _f	0.002	ASTM D150	-
Dielectric factor@1.8GHz D _f	0.021	ASTM D150	-
THERMAL			
Thermal conductivity	8.0	ASTM D5470	W/m*K
Thermal conductivity	5.5	ISO 22007-2	W/m*K
Thermal impedance@10psi	0.260	ASTM D5470	°C-in ² / W
Thermal impedance@20psi	0.221	ASTM D5470	°C-in ² / W
Thermal impedance@30psi	0.148	ASTM D5470	°C-in ² / W
Thermal impedance@40psi	0.122	ASTM D5470	°C-in ² / W
Thermal impedance@50psi	0.112	ASTM D5470	°C-in ² / W
Coefficient of thermal expansion	-236.67x10 ⁻⁶	ASTM E228	1/K

■ THERMAL IMPEDANCE & COMPRESSION

Compression Force (psi)	Thermal Impedance (°C-in ² /W)			Compression (%)		
	1.0 mm	2.0 mm	3.0 mm	1.0 mm	2.0 mm	3.0 mm
10	0.260	0.427	0.613	7	13	16
20	0.221	0.344	0.372	20	30	56
30	0.148	0.212	0.227	43	58	69
40	0.122	0.156	0.182	64	76	85
50	0.112	0.133	0.148	68	80	89

Test method: ASTM D5470

■ RELIABILITY

Test Property	Compression Force (psi)	70°C				
		Initial	100 hrs	250 hrs	500 hrs	1000 hrs
Thermal Resistance	10	0.260	0.261	0.260	0.261	0.262
	30	0.148	0.148	0.149	0.149	0.150
	50	0.112	0.113	0.114	0.113	0.115

Test Property	Compression Force (psi)	150°C				
		Initial	100 hrs	250 hrs	500 hrs	1000 hrs
Thermal Resistance	10	0.260	0.261	0.262	0.261	0.262
	30	0.148	0.149	0.150	0.149	0.151
	50	0.112	0.114	0.113	0.113	0.114

Test Property	Compression Force (psi)	60°C / 90%RH				
		Initial	100 hrs	250 hrs	500 hrs	1000 hrs
Thermal Resistance	10	0.260	0.260	0.259	0.260	0.259
	30	0.148	0.149	0.148	0.149	0.149
	50	0.112	0.113	0.112	0.112	0.111

Test Property	Compression Force (psi)	-40°C (30min) ↔ +125°C (30min)					
		0 Cycles	100 Cycles	200 Cycles	300 Cycles	400 Cycles	500 Cycles
Thermal Resistance	10	0.260	0.260	0.261	0.260	0.261	0.261
	30	0.148	0.149	0.148	0.150	0.149	0.150
	50	0.112	0.113	0.112	0.113	0.113	0.114

Test Property	Compression Force (psi)	Ultra Low Temperature -60°C					
		Initial	100 hrs	200 hrs	300 hrs	400 hrs	500 hrs
Thermal Resistance	10	0.260	0.260	0.261	0.260	0.261	0.260
	30	0.148	0.147	0.148	0.147	0.148	0.148
	50	0.112	0.111	0.112	0.112	0.112	0.111

Test method: ASTM D5470 , Specimen thickness = 1.0mm , Unit: °C-in²/W

Note: All specifications provided by LiPOLY are subject to change without notice. The test methods used by LiPOLY are based on the TIM Tester method and ASTM D5470 test method. These test methods are used as the definition standards for LiPOLY. Property values provided in this document are not for product specifications or guaranteed. This document does not guarantee the performance and quality required for the purchaser's specific purpose. The purchaser needs to evaluate and verify the safety before using the material. We strongly recommend the purchaser pre-test the product and verify the performance of the product under the purchaser's specific conditions. Liability and use of the product are the responsibility of the end user. LiPOLY makes no warranty as to the suitability, merchantability, or non-infringement of any LiPOLY material or product for any specific or general uses. LiPOLY shall not be liable for incidental or consequential damages of any kind. All LiPOLY products are sold in accordance with the LiPOLY Terms and Conditions in effect at the time of purchase and a copy of which will be furnished upon request. All rights reserved, including LiPOLY trademarks or registered trademarks of LiPOLY or its affiliates. Statements concerning possible or suggested uses made herein shall not be relied upon or be construed as a guaranty of patent infringement. Copyright 2023 LiPOLY.

T-work7000

High Thermal Conductive Gap Filler

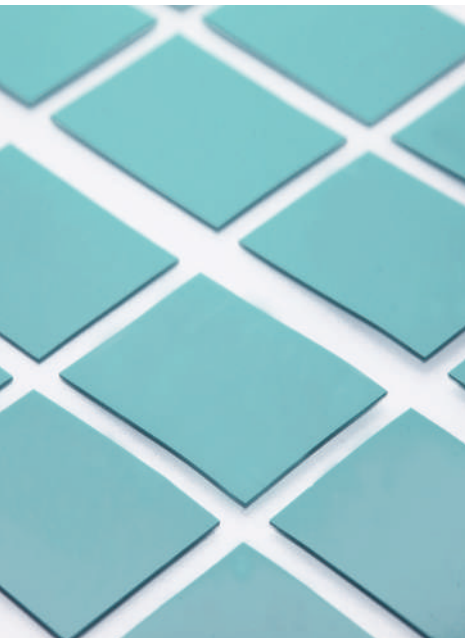
LiPOLY T-work7000 offers outstanding thermal conductivity at 11.0 W/m*K and extremely low thermal resistance under minimal force. T-work7000 offers excellent compression, filling small air gaps on uneven surfaces, ensuring an efficient and consistent transfer of heat.

■ FEATURES

- / Thermal conductivity: 11.0 W/m*K
- / High compression rate
- / Extremely low thermal impedance

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Flat-panel displays
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / 5G base station & infrastructure
- / EV electric vehicle



■ CONSTRUCTION

Series	Characteristics	Configurations
T-work7000	Silicone compound with weak sticky surfaces.	Sheets form, Die-cuts parts

■ TYPICAL PROPERTIES

PROPERTY	T-work7000	TEST METHOD	UNIT
Color	Gray Green	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.4	ASTM D792	g/cm ³
Hardness	65	ASTM D2240	Shore 000
TML	<0.1	By LiPOLY	%
Application temperature	-60~150	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION			
Deflection @10 psi	14	ASTM D5470 modify	%
Deflection @20 psi	24	ASTM D5470 modify	%
Deflection @30 psi	47	ASTM D5470 modify	%
Deflection @40 psi	55	ASTM D5470 modify	%
Deflection @50 psi	59	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
Dielectric constant@10MHz D _k	10.4	ASTM D150	-
Dielectric constant@1GHz D _k	10.4	ASTM D150	-
Dielectric constant@1.8GHz D _k	11.6	ASTM D150	-
Dielectric factor@10MHz D _f	0.007	ASTM D150	-
Dielectric factor@1GHz D _f	0.001	ASTM D150	-
Dielectric factor@1.8GHz D _f	0.021	ASTM D150	-
THERMAL			
Thermal conductivity	11.0	ASTM D5470	W/m*K
Thermal conductivity	6.5	ISO 22007-2	W/m*K
Thermal impedance@10psi	0.223	ASTM D5470	°C-in ² / W
Thermal impedance@20psi	0.202	ASTM D5470	°C-in ² / W
Thermal impedance@30psi	0.140	ASTM D5470	°C-in ² / W
Thermal impedance@40psi	0.119	ASTM D5470	°C-in ² / W
Thermal impedance@50psi	0.108	ASTM D5470	°C-in ² / W
Coefficient of thermal expansion	-244.48x10 ⁻⁶	ASTM E228	1/K

■ THERMAL IMPEDANCE & COMPRESSION

Compression Force (psi)	Thermal Impedance (°C-in ² /W)			Compression (%)		
	1.0 mm	2.0 mm	3.0 mm	1.0 mm	2.0 mm	3.0 mm
10	0.223	0.388	0.579	14	15	16
20	0.202	0.327	0.341	24	34	57
30	0.140	0.200	0.216	47	60	71
40	0.119	0.146	0.172	55	69	77
50	0.108	0.127	0.139	59	73	81

Test method: ASTM D5470

■ RELIABILITY

Test Property	Compression Force (psi)	70°C				
		Initial	100 hrs	250 hrs	500 hrs	1000 hrs
Thermal Resistance	10	0.223	0.224	0.223	0.224	0.225
	30	0.140	0.141	0.141	0.141	0.142
	50	0.108	0.110	0.109	0.109	0.111

Test Property	Compression Force (psi)	150°C				
		Initial	100 hrs	250 hrs	500 hrs	1000 hrs
Thermal Resistance	10	0.223	0.224	0.225	0.224	0.225
	30	0.140	0.142	0.143	0.142	0.143
	50	0.108	0.110	0.111	0.109	0.108

Test Property	Compression Force (psi)	60°C / 90%RH				
		Initial	100 hrs	250 hrs	500 hrs	1000 hrs
Thermal Resistance	10	0.223	0.222	0.223	0.222	0.221
	30	0.140	0.141	0.142	0.149	0.141
	50	0.108	0.109	0.108	0.108	0.107

Test Property	Compression Force (psi)	-40°C (30min) ↔ +125°C (30min)					
		0 Cycles	100 Cycles	200 Cycles	300 Cycles	400 Cycles	500 Cycles
Thermal Resistance	10	0.223	0.223	0.224	0.223	0.224	0.223
	30	0.140	0.142	0.141	0.142	0.143	0.143
	50	0.108	0.109	0.110	0.110	0.109	0.110

Test Property	Compression Force (psi)	Ultra Low Temperature -60°C					
		Initial	100 hrs	200 hrs	300 hrs	400 hrs	500 hrs
Thermal Resistance	10	0.223	0.222	0.223	0.223	0.224	0.223
	30	0.140	0.141	0.142	0.142	0.143	0.141
	50	0.108	0.111	0.109	0.110	0.109	0.110

Test method: ASTM D5470 , Specimen thickness = 1.0mm , Unit: °C-in²/W

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T-top91-s

High Thermal Conductive Gap Filler

LiPOLY T-top91-s offers outstanding thermal conductivity at 13.0 W/m*K and extremely low thermal resistance under minimal force.

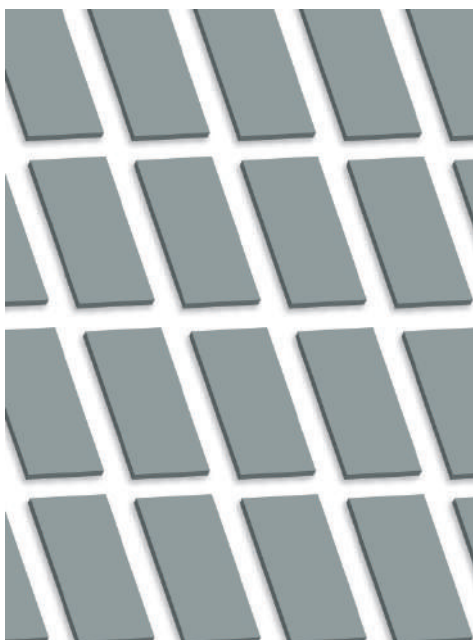
T-top91-s offers excellent compression, filling small air gaps on uneven surfaces, ensuring an efficient and consistent transfer of heat.

■ FEATURES

- / Thermal conductivity: 13.0 W/m*K
- / High compression rate
- / Extremely low thermal impedance

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Flat-panel displays
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / 5G base station & infrastructure
- / EV electric vehicle



■ CONSTRUCTION

Series	Characteristics	Configurations
T-top91-s	Silicone compound with weak sticky surfaces.	Sheets form, Die-cuts parts

■ TYPICAL PROPERTIES

PROPERTY	T-top91-s	TEST METHOD	UNIT
Color	Gray Green	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.4	ASTM D792	g/cm ³
Hardness	65	ASTM D2240	Shore 000
TML	<0.1	By LiPOLY	%
Application temperature	-60~150	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION			
Deflection @10 psi	11	ASTM D5470 modify	%
Deflection @20 psi	38	ASTM D5470 modify	%
Deflection @30 psi	59	ASTM D5470 modify	%
Deflection @40 psi	69	ASTM D5470 modify	%
Deflection @50 psi	76	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
Dielectric constant@10MHz D _k	9.9	ASTM D150	-
Dielectric constant@1GHz D _k	9.8	ASTM D150	-
Dielectric constant@1.8GHz D _k	11.4	ASTM D150	-
Dielectric factor@10MHz D _f	0.007	ASTM D150	-
Dielectric factor@1GHz D _f	0.004	ASTM D150	-
Dielectric factor@1.8GHz D _f	0.024	ASTM D150	-
THERMAL			
Thermal conductivity	13.0	ASTM D5470	W/m*K
Thermal conductivity	8.0	ISO 22007-2	W/m*K
Thermal impedance@10psi	0.201	ASTM D5470	°C-in ² / W
Thermal impedance@20psi	0.159	ASTM D5470	°C-in ² / W
Thermal impedance@30psi	0.103	ASTM D5470	°C-in ² / W
Thermal impedance@40psi	0.084	ASTM D5470	°C-in ² / W
Thermal impedance@50psi	0.075	ASTM D5470	°C-in ² / W
Coefficient of thermal expansion	-179.04x10 ⁻⁶	ASTM E228	1/K

■ THERMAL IMPEDANCE & COMPRESSION

Compression Force (psi)	Thermal Impedance (°C-in ² /W)			Compression (%)		
	1.0 mm	2.0 mm	3.0 mm	1.0 mm	2.0 mm	3.0 mm
10	0.201	0.355	0.418	11	17	23
20	0.159	0.290	0.283	38	40	64
30	0.103	0.169	0.183	59	64	79
40	0.084	0.141	0.156	69	73	82
50	0.075	0.118	0.126	76	75	85

Test method: ASTM D5470

■ RELIABILITY

Test Property	Compression Force (psi)	70°C				
		Initial	100 hrs	250 hrs	500 hrs	1000 hrs
Thermal Resistance	10	0.201	0.201	0.201	0.202	0.202
	30	0.103	0.103	0.104	0.103	0.104
	50	0.075	0.075	0.075	0.076	0.076

Test Property	Compression Force (psi)	150°C				
		Initial	100 hrs	250 hrs	500 hrs	1000 hrs
Thermal Resistance	10	0.201	0.201	0.202	0.202	0.202
	30	0.103	0.103	0.104	0.103	0.105
	50	0.075	0.075	0.076	0.077	0.077

Test Property	Compression Force (psi)	60°C / 90%RH				
		Initial	100 hrs	250 hrs	500 hrs	1000 hrs
Thermal Resistance	10	0.201	0.201	0.202	0.202	0.202
	30	0.103	0.103	0.104	0.103	0.104
	50	0.075	0.075	0.075	0.076	0.076

Test Property	Compression Force (psi)	-40°C (30min) ↔ +125°C (30min)					
		0 Cycles	100 Cycles	200 Cycles	300 Cycles	400 Cycles	500 Cycles
Thermal Resistance	10	0.201	0.202	0.202	0.203	0.203	0.203
	30	0.103	0.103	0.104	0.104	0.105	0.105
	50	0.075	0.075	0.075	0.076	0.075	0.076

Test Property	Compression Force (psi)	Ultra Low Temperature -60°C					
		Initial	100 hrs	200 hrs	300 hrs	400 hrs	500 hrs
Thermal Resistance	10	0.201	0.202	0.202	0.203	0.203	0.202
	30	0.103	0.103	0.103	0.104	0.104	0.104
	50	0.075	0.075	0.076	0.076	0.075	0.076

Test method: ASTM D5470 , Specimen thickness = 1.0mm , Unit: °C-in²/W

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T-work8000

High Thermal Conductive Gap Filler

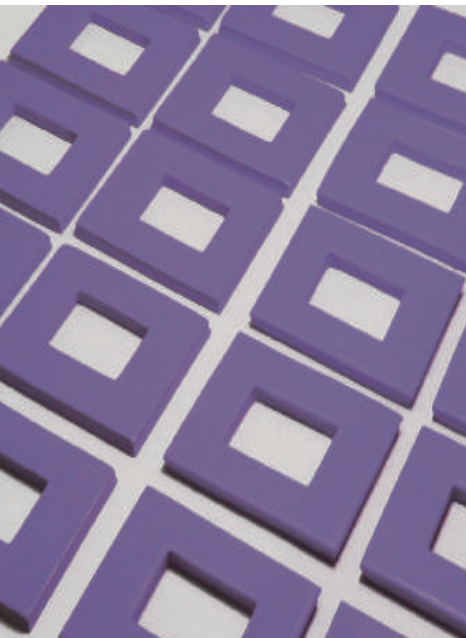
LiPOLY T-work8000 offers outstanding thermal conductivity at 15.0 W/m*K and extremely low thermal resistance under minimal force. T-work8000 offers excellent compression, filling small air gaps on uneven surfaces, ensuring an efficient and consistent transfer of heat.

■ FEATURES

- / Thermal conductivity: 15.0 W/m*K
- / High compression rate
- / Extremely low thermal impedance

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Flat-panel displays
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / 5G base station & infrastructure
- / EV electric vehicle



■ CONSTRUCTION

Series	Characteristics	Configurations
T-work8000	Silicone compound with weak sticky surfaces.	Sheets form, Die-cuts parts

■ TYPICAL PROPERTIES

PROPERTY	T-work8000	TEST METHOD	UNIT
Color	Purple	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.3	ASTM D792	g/cm ³
Hardness	65	ASTM D2240	Shore 000
TML	<0.1	By LiPOLY	%
Application temperature	-60~150	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION			
Deflection @10 psi	10	ASTM D5470 modify	%
Deflection @20 psi	42	ASTM D5470 modify	%
Deflection @30 psi	64	ASTM D5470 modify	%
Deflection @40 psi	71	ASTM D5470 modify	%
Deflection @50 psi	79	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
Dielectric constant@10MHz D _k	9.4	ASTM D150	-
Dielectric constant@1GHz D _k	9.3	ASTM D150	-
Dielectric constant@1.8GHz D _k	10.3	ASTM D150	-
Dielectric factor@10MHz D _f	0.006	ASTM D150	-
Dielectric factor@1GHz D _f	0.009	ASTM D150	-
Dielectric factor@1.8GHz D _f	0.028	ASTM D150	-
THERMAL			
Thermal conductivity	15.0	ASTM D5470	W/m*K
Thermal conductivity	9.0	ISO 22007-2	W/m*K
Thermal impedance@10psi	0.185	ASTM D5470	°C-in ² / W
Thermal impedance@20psi	0.122	ASTM D5470	°C-in ² / W
Thermal impedance@30psi	0.074	ASTM D5470	°C-in ² / W
Thermal impedance@40psi	0.054	ASTM D5470	°C-in ² / W
Thermal impedance@50psi	0.046	ASTM D5470	°C-in ² / W
Coefficient of thermal expansion	-89.56x10 ⁻⁶	ASTM E228	1/K

■ THERMAL IMPEDANCE & COMPRESSION

Compression Force (psi)	Thermal Impedance (°C-in ² /W)			Compression (%)		
	1.0 mm	2.0 mm	3.0 mm	1.0 mm	2.0 mm	3.0 mm
10	0.185	0.293	0.335	10	20	41
20	0.122	0.167	0.174	42	60	72
30	0.074	0.106	0.115	64	74	82
40	0.054	0.076	0.083	71	82	87
50	0.046	0.059	0.064	79	86	90

Test method: ASTM D5470

■ RELIABILITY

Test Property	Compression Force (psi)	70°C				
		Initial	100 hrs	250 hrs	500 hrs	1000 hrs
Thermal Resistance	10	0.185	0.183	0.184	0.185	0.187
	30	0.074	0.076	0.076	0.075	0.077
	50	0.046	0.048	0.047	0.046	0.048

Test Property	Compression Force (psi)	150°C				
		Initial	100 hrs	250 hrs	500 hrs	1000 hrs
Thermal Resistance	10	0.185	0.186	0.187	0.186	0.187
	30	0.074	0.076	0.077	0.077	0.078
	50	0.046	0.048	0.047	0.047	0.048

Test Property	Compression Force (psi)	60°C / 90%RH				
		Initial	100 hrs	250 hrs	500 hrs	1000 hrs
Thermal Resistance	10	0.185	0.186	0.185	0.184	0.183
	30	0.074	0.076	0.077	0.076	0.075
	50	0.046	0.047	0.046	0.045	0.045

Test Property	Compression Force (psi)	-40°C (30min) ↔ +125°C (30min)					
		0 Cycles	100 Cycles	200 Cycles	300 Cycles	400 Cycles	500 Cycles
Thermal Resistance	10	0.185	0.183	0.184	0.186	0.185	0.186
	30	0.074	0.073	0.074	0.077	0.076	0.076
	50	0.046	0.047	0.045	0.048	0.047	0.047

Test Property	Compression Force (psi)	Ultra Low Temperature -60°C					
		Initial	100 hrs	200 hrs	300 hrs	400 hrs	500 hrs
Thermal Resistance	10	0.185	0.186	0.185	0.184	0.185	0.186
	30	0.074	0.075	0.075	0.073	0.074	0.075
	50	0.046	0.047	0.046	0.045	0.047	0.047

Test method: ASTM D5470 , Specimen thickness = 1.0mm , Unit: °C-in²/W

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T-top98-s

High Thermal Conductive Gap Filler

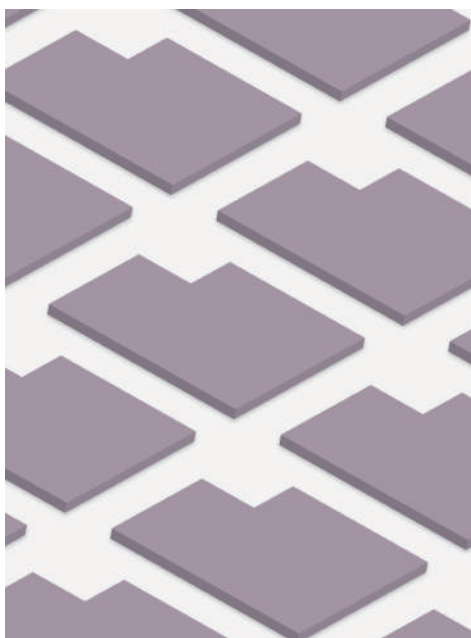
LiPOLY T-top98-s offers outstanding thermal conductivity at 18.0 W/m*K and extremely low thermal resistance under minimal force. T-top98-s offers excellent compression, filling small air gaps on uneven surfaces, ensuring an efficient and consistent transfer of heat.

■ FEATURES

- / Thermal conductivity: 18.0 W/m*K
- / High compression rate
- / Extremely low thermal impedance

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Flat-panel displays
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / 5G base station & infrastructure
- / EV electric vehicle



■ CONSTRUCTION

Series	Characteristics	Configurations
T-top98-s	Silicone compound with weak sticky surfaces.	Sheets form, Die-cuts parts

■ TYPICAL PROPERTIES

PROPERTY	T-top98-s	TEST METHOD	UNIT
Color	Purple	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.3	ASTM D792	g/cm ³
Hardness	65	ASTM D2240	Shore 000
TML	<0.1	By LiPOLY	%
Application temperature	-60~150	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION			
Deflection @10 psi	11	ASTM D5470 modify	%
Deflection @20 psi	38	ASTM D5470 modify	%
Deflection @30 psi	62	ASTM D5470 modify	%
Deflection @40 psi	71	ASTM D5470 modify	%
Deflection @50 psi	77	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
Dielectric constant@10MHz D _k	10.0	ASTM D150	-
Dielectric constant@1GHz D _k	9.9	ASTM D150	-
Dielectric constant@1.8GHz D _k	10.3	ASTM D150	-
Dielectric factor@10MHz D _f	0.003	ASTM D150	-
Dielectric factor@1GHz D _f	0.007	ASTM D150	-
Dielectric factor@1.8GHz D _f	0.025	ASTM D150	-
THERMAL			
Thermal conductivity	18.0	ASTM D5470	W/m*K
Thermal conductivity	10.5	ISO 22007-2	W/m*K
Thermal impedance@10psi	0.149	ASTM D5470	°C-in ² / W
Thermal impedance@20psi	0.104	ASTM D5470	°C-in ² / W
Thermal impedance@30psi	0.061	ASTM D5470	°C-in ² / W
Thermal impedance@40psi	0.046	ASTM D5470	°C-in ² / W
Thermal impedance@50psi	0.039	ASTM D5470	°C-in ² / W
Coefficient of thermal expansion	-312.13x10 ⁻⁶	ASTM E228	1/K

■ THERMAL IMPEDANCE & COMPRESSION

Compression Force (psi)	Thermal Impedance (°C-in ² /W)			Compression (%)		
	1.0 mm	2.0 mm	3.0 mm	1.0 mm	2.0 mm	3.0 mm
10	0.149	0.247	0.304	11	20	39
20	0.104	0.138	0.156	38	58	71
30	0.061	0.085	0.080	62	75	82
40	0.046	0.064	0.065	71	83	87
50	0.039	0.046	0.054	77	86	90

Test method: ASTM D5470

■ RELIABILITY

Test Property	Compression Force (psi)	70°C				
		Initial	100 hrs	250 hrs	500 hrs	1000 hrs
Thermal Resistance	10	0.149	0.148	0.149	0.148	0.149
	30	0.061	0.061	0.061	0.062	0.062
	50	0.039	0.039	0.038	0.038	0.039

Test Property	Compression Force (psi)	150°C				
		Initial	100 hrs	250 hrs	500 hrs	1000 hrs
Thermal Resistance	10	0.149	0.148	0.149	0.149	0.150
	30	0.061	0.061	0.061	0.062	0.062
	50	0.039	0.039	0.039	0.040	0.040

Test Property	Compression Force (psi)	60°C / 90%RH				
		Initial	100 hrs	250 hrs	500 hrs	1000 hrs
Thermal Resistance	10	0.149	0.148	0.149	0.148	0.149
	30	0.061	0.061	0.060	0.061	0.061
	50	0.039	0.039	0.038	0.040	0.040

Test Property	Compression Force (psi)	-40°C (30min) ↔ +125°C (30min)					
		0 Cycles	100 Cycles	200 Cycles	300 Cycles	400 Cycles	500 Cycles
Thermal Resistance	10	0.149	0.148	0.149	0.148	0.149	0.148
	30	0.061	0.060	0.061	0.060	0.061	0.061
	50	0.039	0.038	0.039	0.038	0.038	0.039

Test Property	Compression Force (psi)	Ultra Low Temperature -60°C					
		Initial	100 hrs	200 hrs	300 hrs	400 hrs	500 hrs
Thermal Resistance	10	0.149	0.148	0.148	0.148	0.149	0.149
	30	0.061	0.060	0.061	0.060	0.061	0.061
	50	0.039	0.039	0.038	0.039	0.040	0.040

Test method: ASTM D5470 , Specimen thickness = 1.0mm , Unit: °C-in²/W

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T-work9000

High Thermal Conductive Gap Filler

LiPOLY T-work9000 offers outstanding thermal conductivity at 20.0 W/m*K and extremely low thermal resistance under minimal force. T-work9000 offers excellent compression, filling small air gaps on uneven surfaces, ensuring an efficient and consistent transfer of heat.

■ FEATURES

- / Thermal conductivity: 20.0 W/m*K
- / High compression rate
- / Extremely low thermal impedance

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Flat-panel displays
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / 5G base station & infrastructure
- / EV electric vehicle



■ CONSTRUCTION

Series	Characteristics	Configurations
T-work9000	Silicone compound with weak sticky surfaces.	Sheets form, Die-cuts parts

■ TYPICAL PROPERTIES

PROPERTY	T-work9000	TEST METHOD	UNIT
Color	Brown	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.3	ASTM D792	g/cm ³
Hardness	65	ASTM D2240	Shore 000
TML	<0.1	By LiPOLY	%
Application temperature	-60~150	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION			
Deflection @10 psi	12	ASTM D5470 modify	%
Deflection @20 psi	27	ASTM D5470 modify	%
Deflection @30 psi	58	ASTM D5470 modify	%
Deflection @40 psi	71	ASTM D5470 modify	%
Deflection @50 psi	74	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
Dielectric constant@10MHz D _k	10.5	ASTM D150	-
Dielectric constant@1GHz D _k	10.4	ASTM D150	-
Dielectric constant@1.8GHz D _k	11.2	ASTM D150	-
Dielectric factor@10MHz D _f	0.001	ASTM D150	-
Dielectric factor@1GHz D _f	0.006	ASTM D150	-
Dielectric factor@1.8GHz D _f	0.022	ASTM D150	-
THERMAL			
Thermal conductivity	20.0	ASTM D5470	W/m*K
Thermal conductivity	12.0	ISO 22007-2	W/m*K
Thermal impedance@10psi	0.110	ASTM D5470	°C-in ² / W
Thermal impedance@20psi	0.088	ASTM D5470	°C-in ² / W
Thermal impedance@30psi	0.050	ASTM D5470	°C-in ² / W
Thermal impedance@40psi	0.037	ASTM D5470	°C-in ² / W
Thermal impedance@50psi	0.031	ASTM D5470	°C-in ² / W
Coefficient of thermal expansion	-538.70x10 ⁻⁶	ASTM E228	1/K

■ THERMAL IMPEDANCE & COMPRESSION

Compression Force (psi)	Thermal Impedance (°C-in ² /W)			Compression (%)		
	1.0 mm	2.0 mm	3.0 mm	1.0 mm	2.0 mm	3.0 mm
10	0.110	0.201	0.255	12	21	31
20	0.088	0.105	0.120	27	55	68
30	0.050	0.056	0.064	58	78	83
40	0.037	0.039	0.042	71	85	89
50	0.031	0.033	0.035	74	86	90

Test method: ASTM D5470

■ RELIABILITY

Test Property	Compression Force (psi)	70°C				
		Initial	100 hrs	250 hrs	500 hrs	1000 hrs
Thermal Resistance	10	0.110	0.111	0.112	0.112	0.113
	30	0.050	0.051	0.052	0.052	0.053
	50	0.031	0.031	0.032	0.032	0.033

Test Property	Compression Force (psi)	150°C				
		Initial	100 hrs	250 hrs	500 hrs	1000 hrs
Thermal Resistance	10	0.110	0.111	0.112	0.113	0.113
	30	0.050	0.051	0.052	0.053	0.053
	50	0.031	0.032	0.032	0.033	0.033

Test Property	Compression Force (psi)	60°C / 90%RH				
		Initial	100 hrs	250 hrs	500 hrs	1000 hrs
Thermal Resistance	10	0.110	0.111	0.112	0.113	0.113
	30	0.050	0.051	0.052	0.053	0.053
	50	0.031	0.032	0.032	0.033	0.033

Test Property	Compression Force (psi)	-40°C (30min) ↔ +125°C (30min)					
		0 Cycles	100 Cycles	200 Cycles	300 Cycles	400 Cycles	500 Cycles
Thermal Resistance	10	0.110	0.110	0.111	0.112	0.113	0.113
	30	0.050	0.050	0.051	0.052	0.052	0.053
	50	0.031	0.032	0.031	0.032	0.032	0.033

Test Property	Compression Force (psi)	Ultra Low Temperature -60°C					
		Initial	100 hrs	200 hrs	300 hrs	400 hrs	500 hrs
Thermal Resistance	10	0.110	0.110	0.111	0.110	0.111	0.110
	30	0.050	0.051	0.050	0.051	0.050	0.050
	50	0.031	0.031	0.032	0.032	0.032	0.031

Test method: ASTM D5470 , Specimen thickness = 1.0mm , Unit: °C-in²/W

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PK223

Thermal Conductive Gel Pad

LiPOLY PK223 is a material designed for gap filling. The thermal conductivity is 2.0 W/m*K. The hardness is Shore OO/30 with high flexibility, high compressibility, high insulating, great self-adhesive, which can cover the tolerance of design making it very stable. It also offers customized shape molding service.

■ FEATURES

- / Thermal conductivity: 2.0 W/m*K
- / Naturally tacky for ease of manufacture
- / Low thermal impedance
- / Available in a range of thicknesses

■ TYPICAL APPLICATION

- / Notebook computers
- / Heat pipe assemblies
- / Memory modules
- / TV hardware
- / Automotive electronics
- / Mobile devices
- / High speed mass storage drives
- / Set-top box
- / IP CAM
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

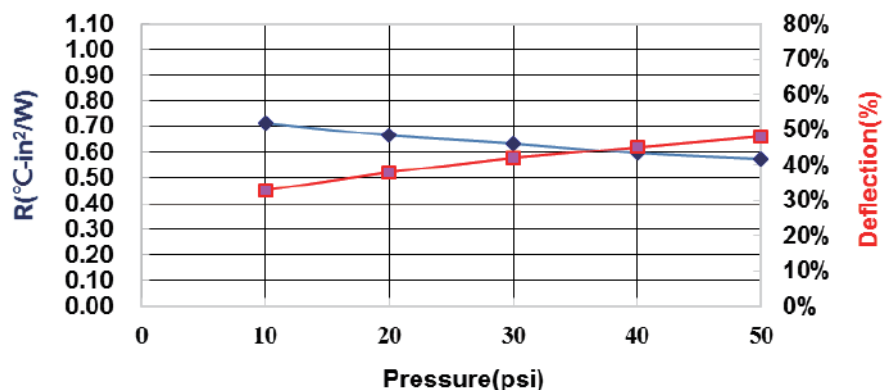
- / Sheet form
- / Die-cut parts



■ TYPICAL PROPERTIES

PROPERTY	PK223	TEST METHOD	UNIT
Color	White	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	2.1	ASTM D792	g/cm ³
Hardness	30	ASTM D2240	Shore OO
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	33	ASTM D5470 modify	%
Deflection @20 psi	38	ASTM D5470 modify	%
Deflection @30 psi	42	ASTM D5470 modify	%
Deflection @40 psi	45	ASTM D5470 modify	%
Deflection @50 psi	48	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	11	ASTM D149	KV/mm
Surface resistivity	>10 ¹⁰	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	2.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.711	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.664	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.633	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.595	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.572	ASTM D5470	°C-in ² / W

Thermal Resistance vs. Pressure vs. Deflection



PK404

Thermal Conductive Gel Pad

LiPOLY PK404 is a material designed for gap filling. The thermal conductivity is 4.0 W/m*K. The hardness is Shore OO/30 with high flexibility, high compressibility, high insulating, great self-adhesive, which can cover the tolerance of design making it very stable. It also offers customized shape molding service.

■ FEATURES

- / Thermal conductivity: 4.0 W/m*K
- / Naturally tacky for ease of manufacture
- / Low thermal impedance
- / Available in a range of thicknesses

■ TYPICAL APPLICATION

- / Notebook computers
- / Heat pipe assemblies
- / Memory modules
- / TV hardware
- / Automotive electronics
- / Mobile devices
- / High speed mass storage drives
- / Set-top box
- / IP CAM
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

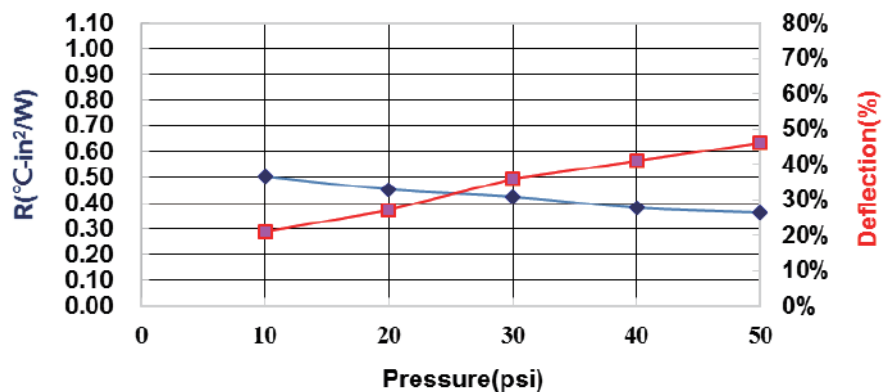
- / Sheet form
- / Die-cut parts



■ TYPICAL PROPERTIES

PROPERTY	PK404	TEST METHOD	UNIT
Color	Blue	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	2.8	ASTM D792	g/cm ³
Hardness	30	ASTM D2240	Shore OO
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	21	ASTM D5470 modify	%
Deflection @20 psi	27	ASTM D5470 modify	%
Deflection @30 psi	36	ASTM D5470 modify	%
Deflection @40 psi	41	ASTM D5470 modify	%
Deflection @50 psi	46	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Surface resistivity	>10 ¹⁰	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	4.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.502	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.452	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.423	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.380	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.361	ASTM D5470	°C-in ² / W

Thermal Resistance vs. Pressure vs. Deflection



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PK504

Thermal Conductive Gel Pad

LiPOLY PK504 is a material designed for gap filling. The thermal conductivity is 5.0 W/m*K. The hardness is Shore OO/50 with high flexibility, high compressibility, high insulating, great self-adhesive, which can cover the tolerance of design making it very stable. It also offers customized shape molding service.

■ FEATURES

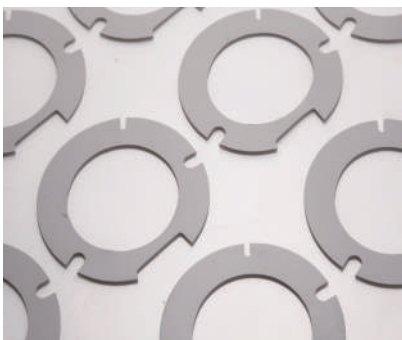
- / Thermal conductivity: 5.0 W/m*K
- / Naturally tacky for ease of manufacture
- / Low thermal impedance
- / Available in a range of thicknesses

■ TYPICAL APPLICATION

- / Notebook computers
- / Heat pipe assemblies
- / Memory modules
- / TV hardware
- / Automotive electronics
- / Mobile devices
- / High speed mass storage drives
- / Set-top box
- / IP CAM
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

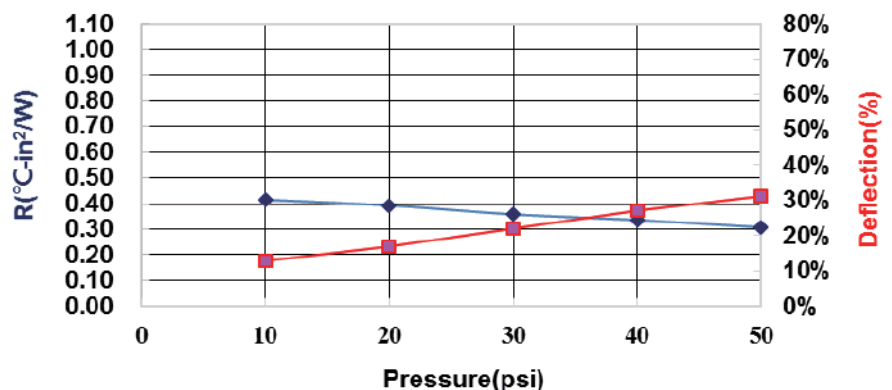
- / Sheet form
- / Die-cut parts



■ TYPICAL PROPERTIES

PROPERTY	PK504	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.0	ASTM D792	g/cm ³
Hardness	50	ASTM D2240	Shore OO
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	13	ASTM D5470 modify	%
Deflection @20 psi	17	ASTM D5470 modify	%
Deflection @30 psi	22	ASTM D5470 modify	%
Deflection @40 psi	27	ASTM D5470 modify	%
Deflection @50 psi	31	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	5.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.415	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.393	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.358	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.336	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.307	ASTM D5470	°C-in ² / W

Thermal Resistance vs. Pressure vs. Deflection



PK605

Thermal Conductive Gel Pad

LiPOLY PK605 is a material designed for gap filling. The thermal conductivity is 6.0 W/m*K. The hardness is Shore OO/60 with high flexibility, high compressibility, high insulating, great self-adhesive, which can cover the tolerance of design making it very stable. It also offers customized shape molding service.

■ FEATURES

- / Thermal conductivity: 6.0 W/m*K
- / Naturally tacky for ease of manufacture
- / Low thermal impedance
- / Available in a range of thicknesses

■ TYPICAL APPLICATION

- / Notebook computers
- / Heat pipe assemblies
- / Memory modules
- / TV hardware
- / Automotive electronics
- / Mobile devices
- / High speed mass storage drives
- / Set-top box
- / IP CAM
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

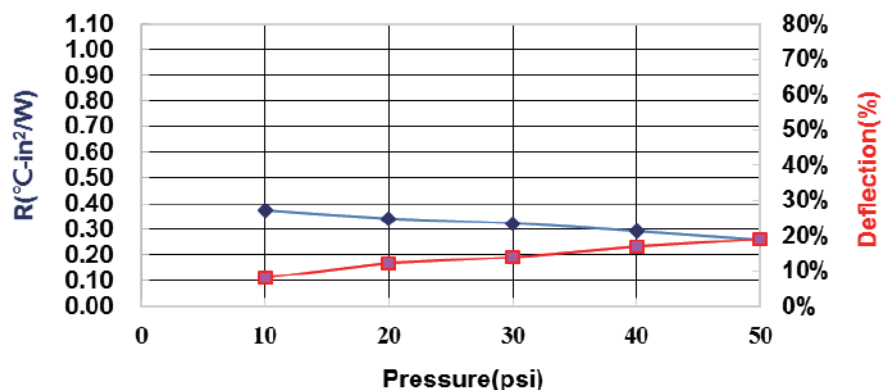
- / Sheet form
- / Die-cut parts



■ TYPICAL PROPERTIES

PROPERTY	PK605	TEST METHOD	UNIT
Color	Red	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.2	ASTM D792	g/cm ³
Hardness	60	ASTM D2240	Shore OO
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	8	ASTM D5470 modify	%
Deflection @20 psi	12	ASTM D5470 modify	%
Deflection @30 psi	14	ASTM D5470 modify	%
Deflection @40 psi	17	ASTM D5470 modify	%
Deflection @50 psi	19	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	6.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.371	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.341	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.323	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.294	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.262	ASTM D5470	°C-in ² / W

Thermal Resistance vs. Pressure vs. Deflection



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PK700

Thermal Conductive Gel Pad

LiPOLY PK700 is a material designed for gap filling. The thermal conductivity is 7.0 W/m*K. The hardness is Shore OO/55 with high flexibility, high compressibility, high insulating, great self-adhesive, which can cover the tolerance of design making it very stable. It also offers customized shape molding service.

■ FEATURES

- / Thermal conductivity: 7.0 W/m*K
- / Naturally tacky for ease of manufacture
- / Low thermal impedance
- / Available in a range of thicknesses

■ TYPICAL APPLICATION

- / Notebook computers
- / Heat pipe assemblies
- / Memory modules
- / TV hardware
- / Automotive electronics
- / Mobile devices
- / High speed mass storage drives
- / Set-top box
- / IP CAM
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

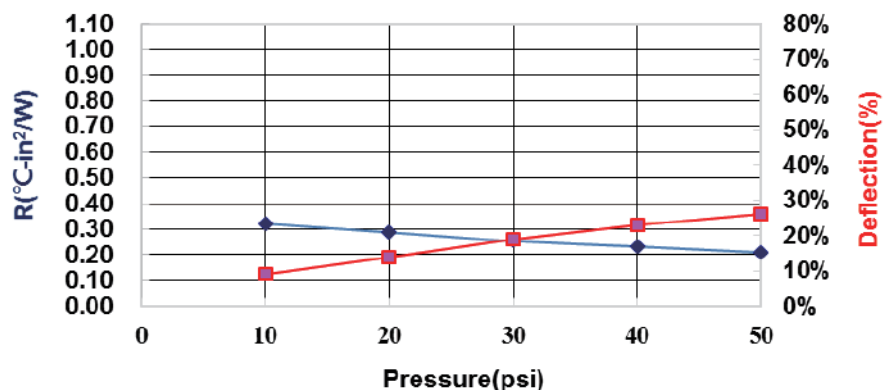
- / Sheet form
- / Die-cut parts



■ TYPICAL PROPERTIES

PROPERTY	PK700	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.3	ASTM D792	g/cm ³
Hardness	55	ASTM D2240	Shore OO
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	9	ASTM D5470 modify	%
Deflection @20 psi	14	ASTM D5470 modify	%
Deflection @30 psi	19	ASTM D5470 modify	%
Deflection @40 psi	23	ASTM D5470 modify	%
Deflection @50 psi	26	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	7.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.321	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.288	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.254	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.233	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.210	ASTM D5470	°C-in ² / W

Thermal Resistance vs. Pressure vs. Deflection



Exceptionally Soft Thermal Conductive Gel Pad

LiPOLY BS75K is an ultra-soft thermally conductive gel pad with a thermal conductivity of 3.0 W/m*K. BS75K offers excellent compression under minimal force with high recovery characteristics. This product can be supplied as standard sheets, custom die-cuts or custom molded parts.

FEATURES

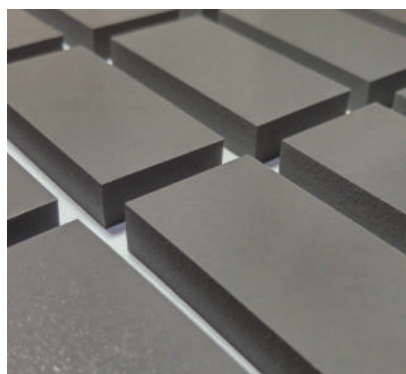
- / Thermal conductivity: 3.0 W/m*K
- / High compression rate
- / Low thermal impedance
- / High recovery
- / Available in a range of thicknesses

TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Notebook computers
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

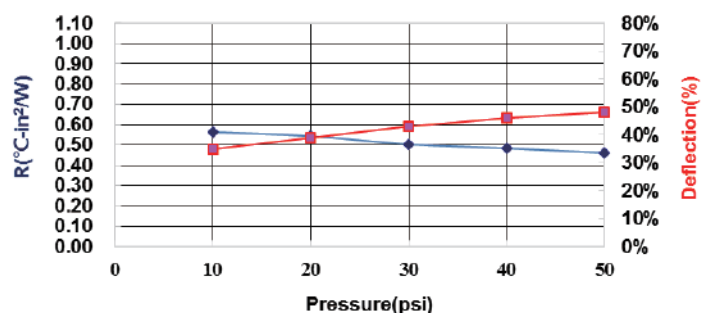
- / Sheet form
- / Die-cut parts



TYPICAL PROPERTIES

PROPERTY	BS75K	TEST METHOD	UNIT
Color	Dark Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	2.6	ASTM D792	g/cm ³
Hardness	18	ASTM D2240	Shore OO
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	35	ASTM D5470 modify	%
Deflection @20 psi	39	ASTM D5470 modify	%
Deflection @30 psi	43	ASTM D5470 modify	%
Deflection @40 psi	46	ASTM D5470 modify	%
Deflection @50 psi	48	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Surface resistivity	>10 ¹⁰	ASTM D257	Ohm
Volume resistivity	>10 ¹¹	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	3.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.562	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.543	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.504	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.485	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.463	ASTM D5470	°C-in ² / W

Thermal Resistance vs. Pressure vs. Deflection



Exceptionally Soft Thermal Conductive Gel Pad

LiPOLY BS87-s is an ultra-soft thermally conductive gel pad with a thermal conductivity of 3.0 W/m*K. BS87-s offers excellent compression under minimal force with high recovery characteristics. This product can be supplied as standard sheets, custom die-cuts or custom molded parts.

■ FEATURES

- / Thermal conductivity: 3.0 W/m*K
- / High compression rate
- / Low thermal impedance
- / High recovery
- / Available in a range of thicknesses

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Notebook computers
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

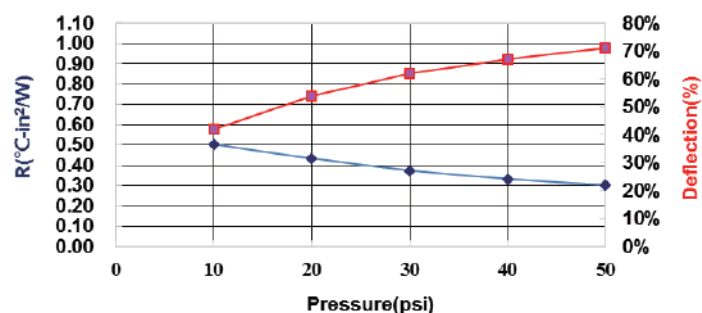
- / Sheet form
- / Die-cut parts



■ TYPICAL PROPERTIES

PROPERTY	BS87-s	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	2.8	ASTM D792	g/cm ³
Hardness	10	ASTM D2240	Shore OO
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	42	ASTM D5470 modify	%
Deflection @20 psi	54	ASTM D5470 modify	%
Deflection @30 psi	62	ASTM D5470 modify	%
Deflection @40 psi	67	ASTM D5470 modify	%
Deflection @50 psi	71	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	3.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.502	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.433	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.374	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.332	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.301	ASTM D5470	°C-in ² / W

Thermal Resistance vs. Pressure vs. Deflection



Exceptionally Soft Thermal Conductive Gel Pad

LiPOLY BS89 is an ultra-soft thermally conductive gel pad with a thermal conductivity of 5.0 W/m*K. BS89 offers excellent compression under minimal force with high recovery characteristics. This product can be supplied as standard sheets, custom die-cuts or custom molded parts.

FEATURES

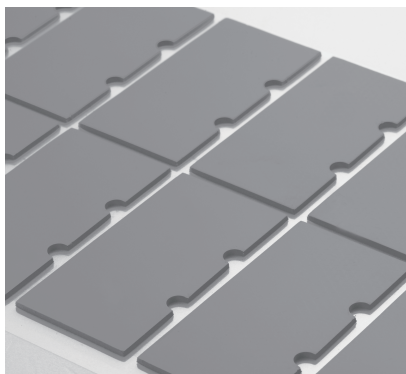
- / Thermal conductivity: 5.0 W/m*K
- / High compression rate
- / Low thermal impedance
- / High recovery
- / Available in a range of thicknesses

TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Notebook computers
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

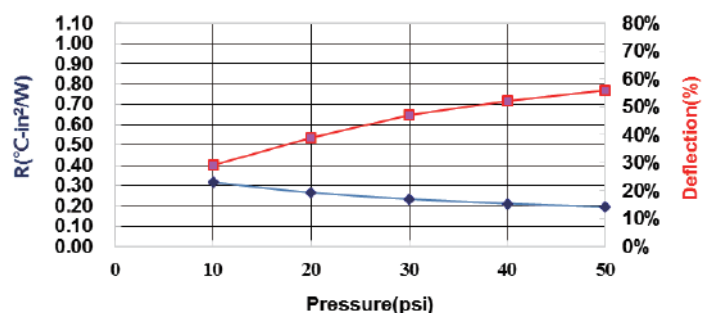
- / Sheet form
- / Die-cut parts



TYPICAL PROPERTIES

PROPERTY	BS89	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.0	ASTM D792	g/cm ³
Hardness	25	ASTM D2240	Shore OO
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	29	ASTM D5470 modify	%
Deflection @20 psi	39	ASTM D5470 modify	%
Deflection @30 psi	47	ASTM D5470 modify	%
Deflection @40 psi	52	ASTM D5470 modify	%
Deflection @50 psi	56	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	5.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.318	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.266	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.233	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.211	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.194	ASTM D5470	°C-in ² / W

Thermal Resistance vs. Pressure vs. Deflection



Exceptionally Soft Thermal Conductive Gel Pad

LiPOLY S282-s is a thermally conductive pad designed for gap filling. The thermal conductivity is 2.5 W/m*K. Using fiberglass reinforced layer and great self-adhesive which can fit closely with non-flat heat sinks to increase the contact area. S282-s is an excellent insulating material with characteristics of low stress damped vibration and shock absorption.

FEATURES

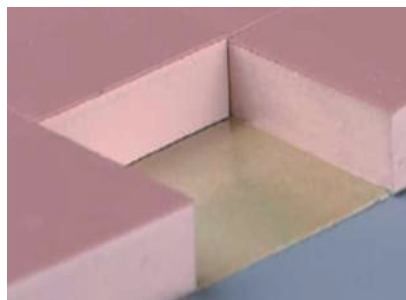
- / Thermal conductivity: 2.5 W/m*K
- / Designed for manufacturing
- / High dielectric breakdown
- / Shock and vibration absorber
- / Good mechanical strength
- / Fiberglass reinforced

TYPICAL APPLICATION

- / Between a component and heat sink
- / Flat-panel displays
- / LED, HDDs, DVDs
- / Heat pipe assemblies
- / Memory modules
- / Power supplies
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

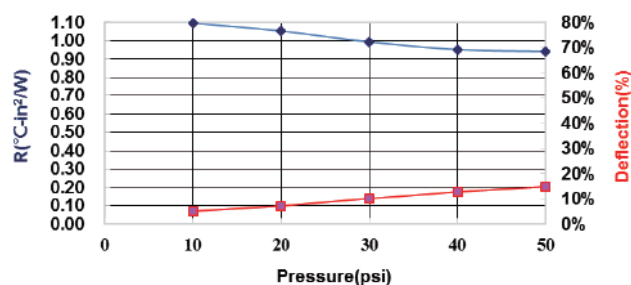
- / Sheet form
- / Die-cut parts



TYPICAL PROPERTIES

PROPERTY	S282-s	TEST METHOD	UNIT
Color	Pink	Visual	-
Surface tack 2-side/1-side	1	-	-
Reinforced layer	Fiberglass	-	-
Thickness	Customized	ASTM D374	mm
Density	2.6	ASTM D792	g/cm ³
Hardness	18	ASTM D2240	Shore OO
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	5	ASTM D5470 modify	%
Deflection @20 psi	7	ASTM D5470 modify	%
Deflection @30 psi	10	ASTM D5470 modify	%
Deflection @40 psi	13	ASTM D5470 modify	%
Deflection @50 psi	15	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Surface resistivity	>10 ¹⁰	ASTM D257	Ohm
Volume resistivity	>10 ¹¹	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	2.5	ASTM D5470	W/m*K
Thermal impedance@10 psi	1.094	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	1.052	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.993	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.952	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.941	ASTM D5470	°C-in ² / W

Thermal Resistance vs. Pressure vs. Deflection



Ultra Low Oil-Bleed Thermal Conductive Gel Pad

LiPOLY AS200-s is a material designed for gap filling. The thermal conductivity is 2.0 W/m*K. The hardness is Shore OO/35, with high flexibility and compressibility. AS200-s has ultra-low oil bleeding properties, which helps reduce pollutants from silicon oil, keeping electronic components clean.

FEATURES

- / Thermal conductivity: 2.0 W/m*K
- / High compressibility
- / Low oil-bleeding
- / Naturally tacky and high resilience

TYPICAL APPLICATION

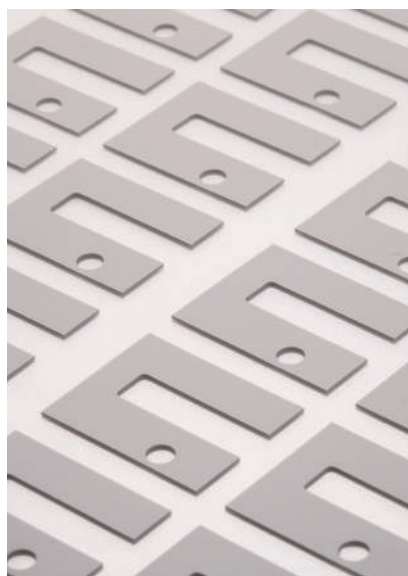
- / Notebook computers
- / Heat pipe assemblies
- / TV hardware
- / Wireless communication hardware
- / High speed mass storage drives
- / Set top box
- / IP CAM
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

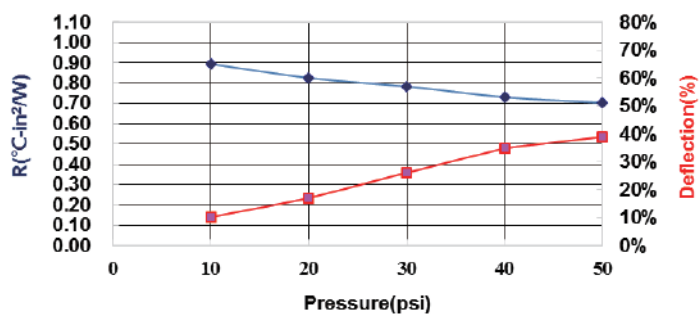
- / Sheet form
- / Die-cut parts

TYPICAL PROPERTIES

PROPERTY	AS200-s	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	2.2	ASTM D792	g/cm ³
Hardness	35	ASTM D2240	Shore OO
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	10	ASTM D5470 modify	%
Deflection @20 psi	17	ASTM D5470 modify	%
Deflection @30 psi	26	ASTM D5470 modify	%
Deflection @40 psi	35	ASTM D5470 modify	%
Deflection @50 psi	39	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Surface resistivity	>10 ¹⁰	ASTM D257	Ohm
Volume resistivity	>10 ¹¹	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	2.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.892	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.824	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.783	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.731	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.704	ASTM D5470	°C-in ² / W

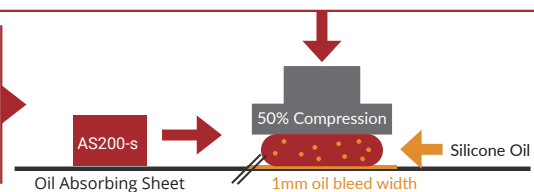


Thermal Resistance vs. Pressure vs. Deflection



OIL BLEEDING

- / Size 30*30mm²
- / Thickness 1.0mm
- / Compression 50%
- / Temperature 25°C
- / Time 120h



Ultra Low Oil-Bleed Thermal Conductive Gel Pad

LiPOLY AS400-s is a material designed for gap filling. The thermal conductivity is 4.0 W/m*K. The hardness is Shore OO/45, with high flexibility and compressibility. AS400-s has ultra-low oil bleeding properties, which helps reduce pollutants from silicon oil, keeping electronic components clean.

FEATURES

- / Thermal conductivity:4.0 W/m*K
- / High compressibility
- / Low oil-bleeding
- / Naturally tacky and high resilience

TYPICAL APPLICATION

- / Notebook computers
- / Heat pipe assemblies
- / TV hardware
- / Wireless communication hardware
- / High speed mass storage drives
- / Set top box
- / IP CAM
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

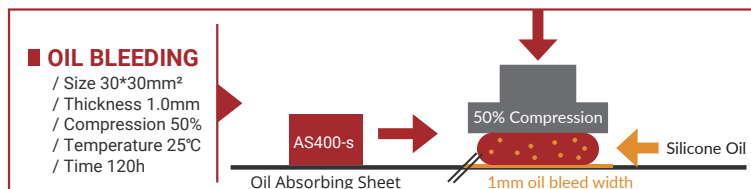
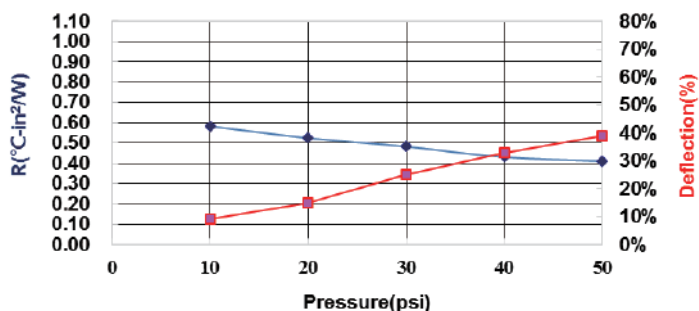
- / Sheet form
- / Die-cut parts

TYPICAL PROPERTIES

PROPERTY	AS400-s	TEST METHOD	UNIT
Color	Blue	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	2.6	ASTM D792	g/cm ³
Hardness	45	ASTM D2240	Shore OO
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	9	ASTM D5470 modify	%
Deflection @20 psi	15	ASTM D5470 modify	%
Deflection @30 psi	25	ASTM D5470 modify	%
Deflection @40 psi	33	ASTM D5470 modify	%
Deflection @50 psi	39	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	4.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.582	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.525	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.483	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.431	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.411	ASTM D5470	°C-in ² / W



Thermal Resistance vs. Pressure vs. Deflection



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N700A

Non-Silicone Thermal Conductive Pad

Non-Silicone Thermal Compound N700A is made of non-silicon resin material. No low molecular siloxane volatilization and low total volatile gas, no electrical contact & pollution problems. N700A is flexible and has great thermal conduction, Low compressive stress and high compressive characteristics can effectively reduce the stress load of components, so that the equipment only needs to bear less mechanical stress, and at the same time, it can have low thermal resistance and high thermal conductivity.

FEATURES

- / Thermal conductivity: 2.5 W/m*K
- / It's made by non-silicone resin materials
- / Low contact thermal resistance
- / With electrical insulation
- / Outstanding thermal conductivity
- / Applicable to optical and sensitive electric components

TYPICAL APPLICATION

- / HDDS
- / Optical appliance
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

- / Sheet form
- / Die-cut parts

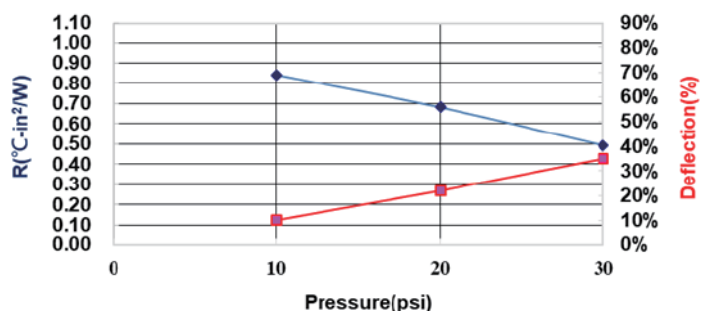


TYPICAL PROPERTIES

PROPERTY	N700A	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	2.4	ASTM D792	g/cm ³
Hardness	60	ASTM D2240	Shore OO
Tensile Strength	1.0	ASTM D412	Kgf/cm ²
Application temperature	-60~125	-	°C
Low molecular Siloxane (D3 to D20 total)	N.D	Gas Chromatography	%
Outgassing CVCN (wt%)	0.0079	By LiPOLY	-
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	10	ASTM D5470 modify	%
Deflection @20 psi	22	ASTM D5470 modify	%
Deflection @30 psi	35	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	16	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	2.5	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.841	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.682	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.494	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.315	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.217	ASTM D5470	°C-in ² / W

The chemical formula indicates that if Cyclic polydimethylsilox-ane (HO-[Si(CH₃)₂O]_n-H) is non-reaction, it's volatile anytime and everywhere. For example, when the electric products which has been put in a confined space, the volatile of low-molecular-weight silox-anes will makes the elecetic products uncontacted.

Thermal Resistance vs. Pressure vs. Deflection



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N700B

Non-Silicone Thermal Conductive Pad

Non-Silicone Thermal Compound N700B is made of non-silicon resin material. No low molecular siloxane volatilization and low total volatile gas, no electrical contact & pollution problems. N700B is flexible and has great thermal conduction, Low compressive stress and high compressive characteristics can effectively reduce the stress load of components, so that the equipment only needs to bear less mechanical stress, and at the same time, it can have low thermal resistance and high thermal conductivity.

FEATURES

- / Thermal conductivity:3.0 W/m*K
- / It's made by non-silicone resin materials
- / Low contact thermal resistance
- / With electrical insulation
- / Outstanding thermal conductivity
- / Applicable to optical and sensitive electric components

TYPICAL APPLICATION

- / HDDS
- / Optical appliance
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

- / Sheet form
- / Die-cut parts

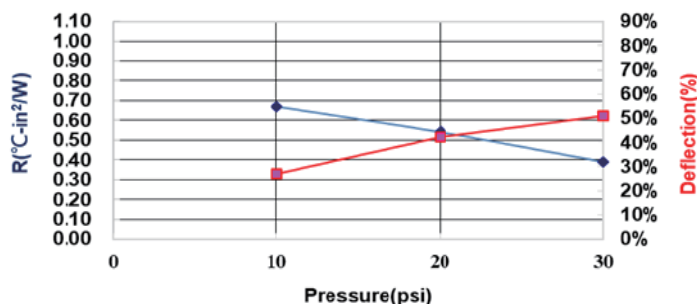


TYPICAL PROPERTIES

PROPERTY	N700B	TEST METHOD	UNIT
Color	Red	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	2.6	ASTM D792	g/cm ³
Hardness	60	ASTM D2240	Shore OO
Tensile Strength	1.0	ASTM D412	Kgf/cm ²
Application temperature	-60~125	-	°C
Low molecular Siloxane (D3 to D20 total)	N.D	Gas Chromatography	%
Outgassing CVCN (wt%)	0.0072	By LiPOLY	-
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	27	ASTM D5470 modify	%
Deflection @20 psi	42	ASTM D5470 modify	%
Deflection @30 psi	51	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	16	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	3.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.671	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.543	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.392	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.236	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.169	ASTM D5470	°C-in ² / W

The chemical formula indicates that if Cyclic polydimethylsilox-ane (HO-[Si(CH₃)₂O]_n-H) is non-reaction, it's volatile anytime and everywhere. For example, when the electric products which has been put in a confined space, the volatile of low-molecular-weight silox-anes will makes the elecetic products uncontacted.

Thermal Resistance vs. Pressure vs. Deflection



N700C

Non-Silicone Thermal Conductive Pad

Non-Silicone Thermal Compound N700C is made of non-silicon resin material. No low molecular siloxane volatilization and low total volatile gas, no electrical contact & pollution problems. N700C is flexible and has great thermal conduction, Low compressive stress and high compressive characteristics can effectively reduce the stress load of components, so that the equipment only needs to bear less mechanical stress, and at the same time, it can have low thermal resistance and high thermal conductivity.

FEATURES

- / Thermal conductivity:5.0 W/m*K
- / It's made by non-silicone resin materials
- / Low contact thermal resistance
- / With electrical insulation
- / Outstanding thermal conductivity
- / Applicable to optical and sensitive electric components

TYPICAL APPLICATION

- / HDDS
- / Optical appliance
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

- / Sheet form
- / Die-cut parts

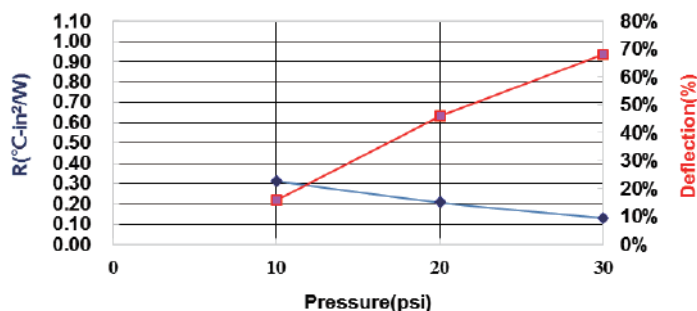


TYPICAL PROPERTIES

PROPERTY	N700C	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.2	ASTM D792	g/cm ³
Hardness	55	ASTM D2240	Shore OO
Tensile Strength	0.15	ASTM D412	Kgf/cm ²
Application temperature	-60~125	-	°C
Low molecular Siloxane (D3 to D20 total)	N.D	Gas Chromatography	%
Outgassing CVCN (wt%)	0.0061	By LiPOLY	-
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	16	ASTM D5470 modify	%
Deflection @20 psi	46	ASTM D5470 modify	%
Deflection @30 psi	68	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	5.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.312	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.208	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.132	ASTM D5470	°C-in ² / W

The chemical formula indicates that if Cyclic polydimethylsilox-ane (HO-[Si(CH3)2O]n-H) is non-reaction, it's volatile anytime and everywhere. For example, when the electric products which has been put in a confined space, the volatile of low-molecular-weight silox-anes will makes the elecetic products uncontacted.

Thermal Resistance vs. Pressure vs. Deflection



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N800AH-s

Non-Silicone Thermal Conductive Pad

Non-Silicone Thermal Compound N800AH-s is made of non-silicon resin material. No low molecular siloxane volatilization and low total volatile gas, no electrical contact & pollution problems. N800AH-s is flexible and has great thermal conduction, Low compressive stress and high compressive characteristics can effectively reduce the stress load of components, so that the equipment only needs to bear less mechanical stress, and at the same time, it can have low thermal resistance and high thermal conductivity.

■ FEATURES

- / Thermal conductivity: 7.0 W/m*K
- / It's made by non-silicone resin materials
- / Low contact thermal resistance
- / With electrical insulation
- / Outstanding thermal conductivity
- / Applicable to optical and sensitive electric components

■ TYPICAL APPLICATION

- / HDDS
- / Optical appliance
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

- / Sheet form
- / Die-cut parts

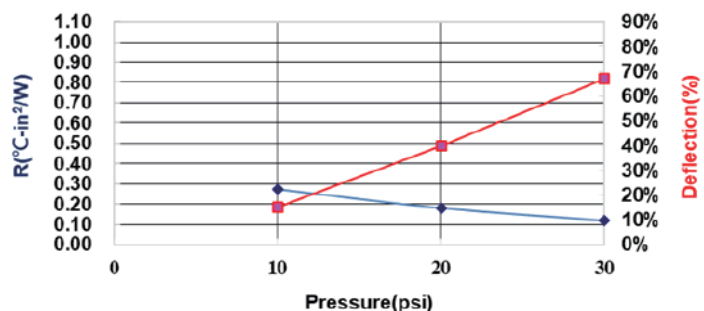


■ TYPICAL PROPERTIES

PROPERTY	N800AH-s	TEST METHOD	UNIT
Color	Pink	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.3	ASTM D792	g/cm ³
Hardness	60	ASTM D2240	Shore OO
Tensile Strength	0.15	ASTM D412	Kgf/cm ²
Application temperature	-60~125	-	°C
Low molecular Siloxane (D3 to D20 total)	N.D	Gas Chromatography	%
Outgassing CVCM (wt%)	0.0057	By LiPOLY	-
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	15	ASTM D5470 modify	%
Deflection @20 psi	40	ASTM D5470 modify	%
Deflection @30 psi	67	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	7.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.274	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.182	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.121	ASTM D5470	°C-in ² / W

The chemical formula indicates that if Cyclic polydimethylsilox-ane (HO-[Si(CH₃)₂O]_n-H) is non-reaction, it's volatile anytime and everywhere. For example, when the electric products which has been put in a confined space, the volatile of low-molecular-weight silox-anes will makes the elecetic products uncontacted.

Thermal Resistance vs. Pressure vs. Deflection



N800A-s

Non-Silicone Thermal Conductive Pad

Non-Silicone Thermal Compound N800A-s is made of non-silicon resin material. No low molecular siloxane volatilization and low total volatile gas, no electrical contact & pollution problems. N800A-s is flexible and has great thermal conduction, Low compressive stress and high compressive characteristics can effectively reduce the stress load of components, so that the equipment only needs to bear less mechanical stress, and at the same time, it can have low thermal resistance and high thermal conductivity.

FEATURES

- / Thermal conductivity:9.0 W/m*K
- / It's made by non-silicone resin materials
- / Low contact thermal resistance
- / With electrical insulation
- / Outstanding thermal conductivity
- / Applicable to optical and sensitive electric components

TYPICAL APPLICATION

- / HDDS
- / Optical appliance
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

- / Sheet form
- / Die-cut parts

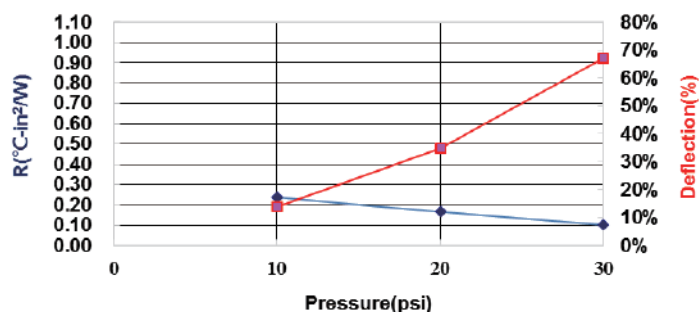


TYPICAL PROPERTIES

PROPERTY	N800A-s	TEST METHOD	UNIT
Color	Pink	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.4	ASTM D792	g/cm ³
Hardness	50	ASTM D2240	Shore OO
Tensile Strength	0.15	ASTM D412	Kgf/cm ²
Application temperature	-60~125	-	°C
Low molecular Siloxane (D3 to D20 total)	N.D	Gas Chromatography	%
Outgassing CVCM (wt%)	0.0049	By LiPOLY	-
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	14	ASTM D5470 modify	%
Deflection @20 psi	35	ASTM D5470 modify	%
Deflection @30 psi	67	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	9.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.238	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.166	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.102	ASTM D5470	°C-in ² / W

The chemical formula indicates that if Cyclic polydimethylsilox-ane (HO-[Si(CH3)2O]n-H) is non-reaction, it's volatile anytime and everywhere. For example, when the electric products which has been put in a confined space, the volatile of low-molecular-weight silox-anes will makes the elecetic products uncontacted.

Thermal Resistance vs. Pressure vs. Deflection



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N800BH

Non-Silicone Thermal Conductive Pad

Non-Silicone Thermal Compound N800BH is made of non-silicon resin material. No low molecular siloxane volatilization and low total volatile gas, no electrical contact & pollution problems. N800BH is flexible and has great thermal conduction, Low compressive stress and high compressive characteristics can effectively reduce the stress load of components, so that the equipment only needs to bear less mechanical stress, and at the same time, it can have low thermal resistance and high thermal conductivity.

FEATURES

- / Thermal conductivity: 11.0 W/m*K
- / It's made by non-silicone resin materials
- / Low contact thermal resistance
- / With electrical insulation
- / Outstanding thermal conductivity
- / Applicable to optical and sensitive electric components

TYPICAL APPLICATION

- / HDDS
- / Optical appliance
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

- / Sheet form
- / Die-cut parts

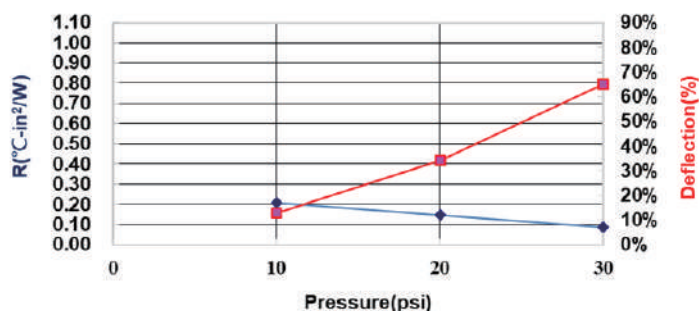


TYPICAL PROPERTIES

PROPERTY	N800BH	TEST METHOD	UNIT
Color	Pink	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.3	ASTM D792	g/cm ³
Hardness	50	ASTM D2240	Shore OO
Tensile Strength	0.15	ASTM D412	Kgf/cm ²
Application temperature	-60~125	-	°C
Low molecular Siloxane (D3 to D20 total)	N.D	Gas Chromatography	%
Outgassing CVCN (wt%)	0.0047	By LiPOLY	-
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	13	ASTM D5470 modify	%
Deflection @20 psi	34	ASTM D5470 modify	%
Deflection @30 psi	65	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	11.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.210	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.148	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.088	ASTM D5470	°C-in ² / W

The chemical formula indicates that if Cyclic polydimethylsilox-ane (HO-[Si(CH₃)₂O]_n-H) is non-reaction, it's volatile anytime and everywhere. For example, when the electric products which has been put in a confined space, the volatile of low-molecular-weight silox-anes will makes the elecetic products uncontacted.

Thermal Resistance vs. Pressure vs. Deflection



N800B

Non-Silicone Thermal Conductive Pad

Non-Silicone Thermal Compound N800B is made of non-silicon resin material. No low molecular siloxane volatilization and low total volatile gas, no electrical contact & pollution problems. N800B is flexible and has great thermal conduction, Low compressive stress and high compressive characteristics can effectively reduce the stress load of components, so that the equipment only needs to bear less mechanical stress, and at the same time, it can have low thermal resistance and high thermal conductivity.

FEATURES

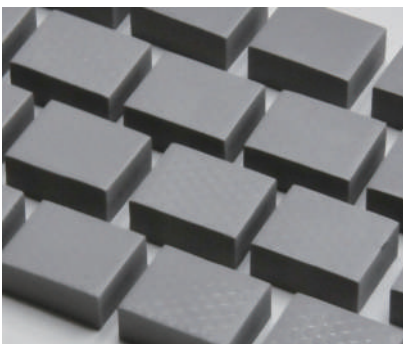
- / Thermal conductivity:13.0 W/m*K
- / It's made by non-silicone resin materials
- / Low contact thermal resistance
- / With electrical insulation
- / Outstanding thermal conductivity
- / Applicable to optical and sensitive electric components

TYPICAL APPLICATION

- / HDDS
- / Optical appliance
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

- / Sheet form
- / Die-cut parts

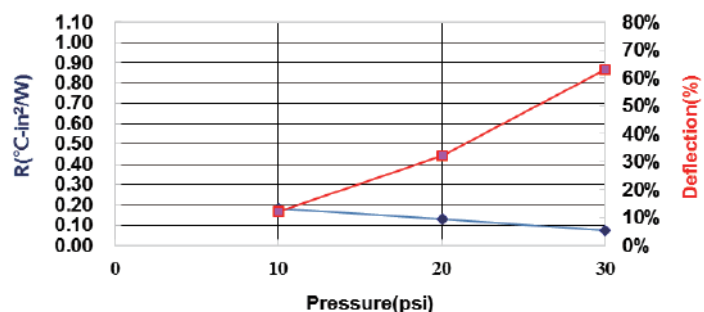


TYPICAL PROPERTIES

PROPERTY	N800B	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.3	ASTM D792	g/cm ³
Hardness	50	ASTM D2240	Shore OO
Tensile Strength	0.15	ASTM D412	Kgf/cm ²
Application temperature	-60~125	-	°C
Low molecular Siloxane (D3 to D20 total)	N.D	Gas Chromatography	%
Outgassing CVCM (wt%)	0.0045	By LiPOLY	-
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	12	ASTM D5470 modify	%
Deflection @20 psi	32	ASTM D5470 modify	%
Deflection @30 psi	63	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	13.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.183	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.131	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.074	ASTM D5470	°C-in ² / W

The chemical formula indicates that if Cyclic polydimethylsilox-ane (HO-[Si(CH3)2O]n-H) is non-reaction, it's volatile anytime and everywhere. For example, when the electric products which has been put in a confined space, the volatile of low-molecular-weight silox-anes will makes the elecetic products uncontacted.

Thermal Resistance vs. Pressure vs. Deflection



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N800CH

Non-Silicone Thermal Conductive Pad

Non-Silicone Thermal Compound N800CH is made of non-silicon resin material. No low molecular siloxane volatilization and low total volatile gas, no electrical contact & pollution problems. N800CH is flexible and has great thermal conduction, Low compressive stress and high compressive characteristics can effectively reduce the stress load of components, so that the equipment only needs to bear less mechanical stress, and at the same time, it can have low thermal resistance and high thermal conductivity.

FEATURES

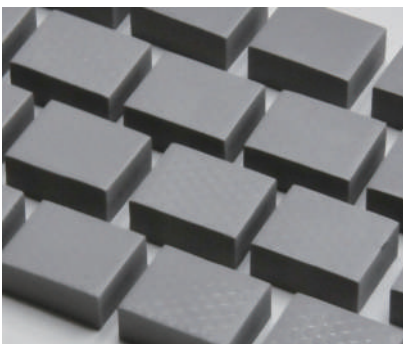
- / Thermal conductivity:15.0 W/m*K
- / It's made by non-silicone resin materials
- / Low contact thermal resistance
- / With electrical insulation
- / Outstanding thermal conductivity
- / Applicable to optical and sensitive electric components

TYPICAL APPLICATION

- / HDDS
- / Optical appliance
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

- / Sheet form
- / Die-cut parts

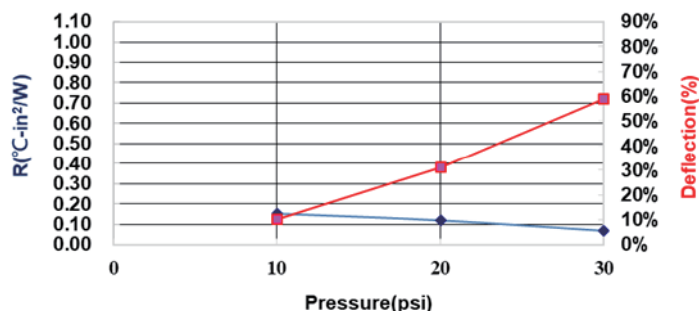


TYPICAL PROPERTIES

PROPERTY	N800CH	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.3	ASTM D792	g/cm ³
Hardness	50	ASTM D2240	Shore OO
Tensile Strength	0.15	ASTM D412	Kgf/cm ²
Application temperature	-60~125	-	°C
Low molecular Siloxane (D3 to D20 total)	N.D	Gas Chromatography	%
Outgassing CVCM (wt%)	0.0040	By LiPOLY	-
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	10	ASTM D5470 modify	%
Deflection @20 psi	31	ASTM D5470 modify	%
Deflection @30 psi	59	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	15.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.153	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.119	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.067	ASTM D5470	°C-in ² / W

The chemical formula indicates that if Cyclic polydimethylsilox-ane (HO-[Si(CH3)2O]_n-H) is non-reaction, it's volatile anytime and everywhere. For example, when the electric products which has been put in a confined space, the volatile of low-molecular-weight silox-anes will makes the elecetic products uncontacted.

Thermal Resistance vs. Pressure vs. Deflection



Note: All specifications provided by LiPOLY are subject to change without notice. The test methods used by LiPOLY are based on the TIM Tester method and ASTM D5470 test method. These test methods are used as the definition standards for LiPOLY. Property values provided in this document are not for product specifications or guaranteed. This document does not guarantee the performance and quality required for the purchaser's specific purpose. The purchaser needs to evaluate and verify the safety before using the material. We strongly recommend the purchaser pre-test the product and verify the performance of the product under the purchaser's specific conditions. Liability and use of the product are the responsibility of the end user. LiPOLY makes no warranty as to the suitability, merchantability, or non-infringement of any LiPOLY material or product for any specific or general uses. LiPOLY shall not be liable for incidental or consequential damages of any kind. All LiPOLY products are sold in accordance with the LiPOLY Terms and Conditions in effect at the time of purchase and a copy of which will be furnished upon request. All rights reserved, including LiPOLY trademarks or registered trademarks of LiPOLY or its affiliates. Statements concerning possible or suggested uses made herein shall not be relied upon or be construed as a guaranty of patent infringement. Copyright 2023 LiPOLY.

N800C

Non-Silicone Thermal Conductive Pad

Non-Silicone Thermal Compound N800C is made of non-silicon resin material. No low molecular siloxane volatilization and low total volatile gas, no electrical contact & pollution problems. N800C is flexible and has great thermal conduction, Low compressive stress and high compressive characteristics can effectively reduce the stress load of components, so that the equipment only needs to bear less mechanical stress, and at the same time, it can have low thermal resistance and high thermal conductivity.

FEATURES

- / Thermal conductivity: 17.0 W/m*K
- / It's made by non-silicone resin materials
- / Low contact thermal resistance
- / With electrical insulation
- / Outstanding thermal conductivity
- / Applicable to optical and sensitive electric components

TYPICAL APPLICATION

- / HDDS
- / Optical appliance
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

- / Sheet form
- / Die-cut parts

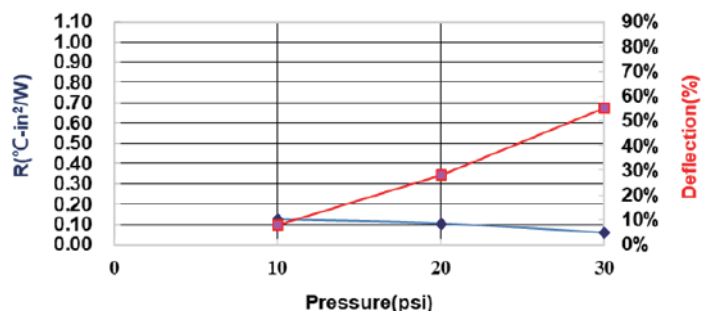


TYPICAL PROPERTIES

PROPERTY	N800C	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.3	ASTM D792	g/cm ³
Hardness	50	ASTM D2240	Shore OO
Tensile Strength	0.15	ASTM D412	Kgf/cm ²
Application temperature	-60~125	-	°C
Low molecular Siloxane (D3 to D20 total)	N.D	Gas Chromatography	%
Outgassing CVCN (wt%)	0.0043	By LiPOLY	-
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	8	ASTM D5470 modify	%
Deflection @20 psi	28	ASTM D5470 modify	%
Deflection @30 psi	55	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	17.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.122	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.103	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.058	ASTM D5470	°C-in ² / W

The chemical formula indicates that if Cyclic polydimethylsilox-ane (HO-[Si(CH3)2O]_n-H) is non-reaction, it's volatile anytime and everywhere. For example, when the electric products which has been put in a confined space, the volatile of low-molecular-weight silox-anes will makes the elecetic products uncontacted.

Thermal Resistance vs. Pressure vs. Deflection



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S-putty

Thermal Conductive Putty

LiPOLY S-putty is a one-part dispensable material with thermal conductivity 3.5 W/m*K. High deformation can fill small air gaps perfectly to remove tolerance. It also can overcome overflow and drying problems to increase the thermal conductivity. S-putty is a great alternative to thermal grease and ideally suited for dispensing using the dispensing robot.

■ FEATURES

- / Thermal conductivity:3.5 W/m*K
- / Bond line thickness:100-1500μm
- / Designed to remove manufacturing tolerances
- / Does not produce stress on delicate components
- / No vertical flow
- / Dispensable for serial manufacture
- / For any high compression and low stress application

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / High speed mass storage drives
- / Telecommunication hardware
- / Flat-panel displays
- / Set-top box
- / IP CAM
- / 5G base station & infrastructure
- / EV electric vehicle

■ CONFIGURATIONS

- / Cartridges: 30ml, 55ml, 330ml
- / Bucket: 1kg, 25kg

■ PRESERVATION

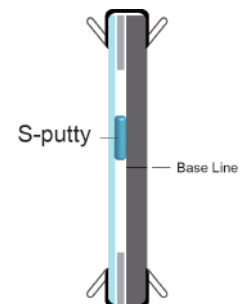
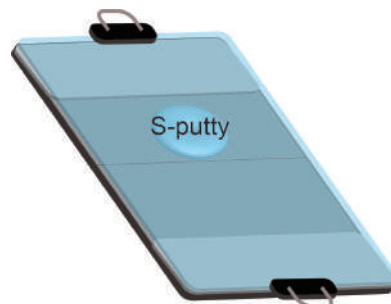
It can be preserved for 60 months under the condition of unopened and under room temperature 25°C.

■ TYPICAL PROPERTIES

PROPERTY	S-putty	TEST METHOD	UNIT
Color	Blue	Visual	-
Resin base	Silicone	-	-
Viscosity	2000	DIN 53018	Pa.s
Density	3.0	ASTM D792	g/cm ³
Application temperature	-60~180	-	°C
Bond line thickness	100~1500	-	μm
Shelf life	60 months	-	-
ROHS & REACH	Compliant	-	-
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Volume resistivity	>10 ¹³	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	3.5	ASTM D5470	W/m*K
Thermal impedance@10psi	0.079	ASTM D5470	°C-in ² / W
Thermal impedance@30psi	0.071	ASTM D5470	°C-in ² / W
Thermal impedance@50psi	0.061	ASTM D5470	°C-in ² / W

■ VERTICAL RELIABILITY

Using 1.5mm pad as a gap control, put the putty between the aluminum and the glass panel mark the initial position. Then, place it in the oven with 125°C for 1,000 hours and observe its displacement after reliability test



Material no dropped or changed after high temperature aging testing

S-putty2-s

Thermal Conductive Putty

LiPOLY S-putty2-s is a one-part dispensable material with thermal conductivity 6.0 W/m*K. High deformation can fill small air gaps perfectly to remove tolerance. It also can overcome overflow and drying problems to increase the thermal conductivity. S-putty2-s is a great alternative to thermal grease and ideally suited for dispensing using the dispensing robot.

■ FEATURES

- / Thermal conductivity:6.0 W/m*K
- / Bond line thickness:100-1500μm
- / Designed to remove manufacturing tolerances
- / Does not produce stress on delicate components
- / No vertical flow
- / Dispensable for serial manufacture
- / For any high compression and low stress application

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / High speed mass storage drives
- / Telecommunication hardware
- / Flat-panel displays
- / Set-top box
- / IP CAM
- / 5G base station & infrastructure
- / EV electric vehicle

■ CONFIGURATIONS

- / Cartridges: 30ml, 55ml, 330ml
- / Bucket: 1kg, 25kg

■ PRESERVATION

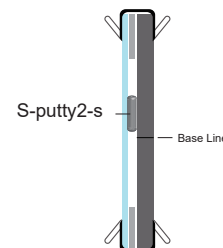
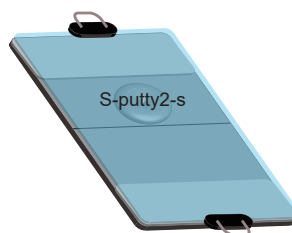
It can be preserved for 60 months under the condition of unopened and under room temperature 25°C.

■ TYPICAL PROPERTIES

PROPERTY	S-putty2-s	TEST METHOD	UNIT
Color	Blue	Visual	-
Resin base	Silicone	-	-
Viscosity	3500	DIN 53018	Pa.s
Density	3.3	ASTM D792	g/cm ³
Application temperature	-60~180	-	°C
Bond line thickness	100~1500	-	μm
Shelf life	60 months	-	-
ROHS & REACH	Compliant	-	-
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Volume resistivity	>10 ¹³	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	6.0	ASTM D5470	W/m*K
Thermal impedance@10psi	0.062	ASTM D5470	°C-in ² / W
Thermal impedance@30psi	0.059	ASTM D5470	°C-in ² / W
Thermal impedance@50psi	0.053	ASTM D5470	°C-in ² / W

■ VERTICAL RELIABILITY

Using 1.5mm pad as a gap control, put the putty between the aluminum and the glass panel mark the initial position. Then, place it in the oven with 125°C for 1,000 hours and observe its displacement after reliability test



Material no dropped or changed after high temperature aging testing

Thermal Conductive Putty

LiPOLY H-putty is a one-part dispensable material with thermal conductivity 3.5 W/m*K. High deformation can fill small air gaps perfectly to remove tolerance. It also can overcome overflow and drying problems to increase the thermal conductivity. H-putty is a great alternative to thermal grease and ideally suited for dispensing using the dispensing robot.

■ FEATURES

- / Thermal conductivity:3.5 W/m*K
- / Bond line thickness:100-3000μm
- / Designed to remove manufacturing tolerances
- / Does not produce stress on delicate components
- / No vertical flow
- / Dispensable for serial manufacture
- / For any high compression and low stress application

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / High speed mass storage drives
- / Telecommunication hardware
- / Flat-panel displays
- / Set-top box
- / IP CAM
- / 5G base station & infrastructure
- / EV electric vehicle

■ CONFIGURATIONS

- / Cartridges: 30ml, 55ml, 330ml
- / Bucket: 1kg, 25kg

■ PRESERVATION

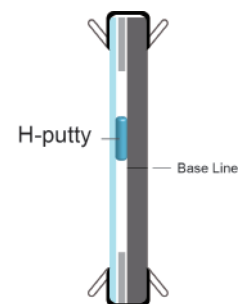
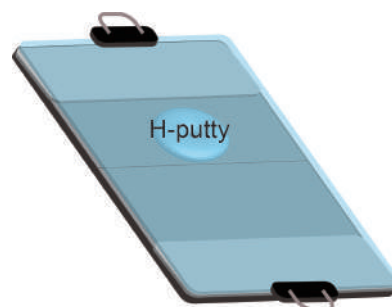
It can be preserved for 60 months under the condition of unopened and under room temperature 25°C.

■ TYPICAL PROPERTIES

PROPERTY	H-putty	TEST METHOD	UNIT
Color	Blue	Visual	-
Resin base	Silicone	-	-
Viscosity	15000	DIN 53018	Pa.s
Density	3.0	ASTM D792	g/cm ³
Application temperature	-60~180	-	°C
Bond line thickness	100~3000	-	μm
Shelf life	60 months	-	-
ROHS & REACH	Compliant	-	-
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Volume resistivity	>10 ¹³	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	3.5	ASTM D5470	W/m*K
Thermal impedance@10psi	0.076	ASTM D5470	°C-in ² / W
Thermal impedance@30psi	0.072	ASTM D5470	°C-in ² / W
Thermal impedance@50psi	0.069	ASTM D5470	°C-in ² / W

■ VERTICAL RELIABILITY

Using 3.0mm pad as a gap control, put the putty between the aluminum and the glass panel mark the initial position. Then, place it in the oven with 125°C for 1,000 hours and observe its displacement after reliability test



Material no dropped or changed after high temperature aging testing

H-putty2

Thermal Conductive Putty

LiPOLY H-putty2 is a one-part dispensable material with thermal conductivity 6.0 W/m*K. High deformation can fill small air gaps perfectly to remove tolerance. It also can overcome overflow and drying problems to increase the thermal conductivity. H-putty2 is a great alternative to thermal grease and ideally suited for dispensing using the dispensing robot.

■ FEATURES

- / Thermal conductivity:6.0 W/m*K
- / Bond line thickness:100-3000μm
- / Designed to remove manufacturing tolerances
- / Does not produce stress on delicate components
- / No vertical flow
- / Dispensable for serial manufacture
- / For any high compression and low stress application

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / High speed mass storage drives
- / Telecommunication hardware
- / Flat-panel displays
- / Set-top box
- / IP CAM
- / 5G base station & infrastructure
- / EV electric vehicle

■ CONFIGURATIONS

- / Cartridges: 30ml, 55ml, 330ml
- / Bucket: 1kg, 25kg

■ PRESERVATION

It can be preserved for 60 months under the condition of unopened and under room temperature 25°C.

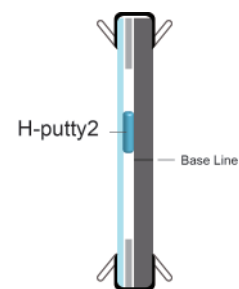


■ TYPICAL PROPERTIES

PROPERTY	H-putty2	TEST METHOD	UNIT
Color	Blue	Visual	-
Resin base	Silicone	-	-
Viscosity	15000	DIN 53018	Pa.s
Density	3.3	ASTM D792	g/cm ³
Application temperature	-60~180	-	°C
Bond line thickness	100~3000	-	μm
Shelf life	60 months	-	-
ROHS & REACH	Compliant	-	-
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Volume resistivity	>10 ¹³	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	6.0	ASTM D5470	W/m*K
Thermal impedance@10psi	0.061	ASTM D5470	°C-in ² / W
Thermal impedance@30psi	0.054	ASTM D5470	°C-in ² / W
Thermal impedance@50psi	0.050	ASTM D5470	°C-in ² / W

■ VERTICAL RELIABILITY

Using 3.0mm pad as a gap control, put the putty between the aluminum and the glass panel mark the initial position. Then, place it in the oven with 125°C for 1,000 hours and observe its displacement after reliability test



Material no dropped or changed after high temperature aging testing

SH-putty3

Thermal Conductive Putty

LiPOLY SH-putty3 is a one-part dispensable material with thermal conductivity 8.0 W/m*K. High deformation can fill small air gaps perfectly to remove tolerance. It also can overcome overflow and drying problems to increase the thermal conductivity. SH-putty3 is a great alternative to thermal grease and ideally suited for dispensing using the dispensing robot.

■ FEATURES

- / Thermal conductivity:8.0 W/m*K
- / Bond line thickness:100-3000μm
- / Designed to remove manufacturing tolerances
- / Does not produce stress on delicate components
- / No vertical flow
- / Dispensable for serial manufacture
- / For any high compression and low stress application

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / High speed mass storage drives
- / Telecommunication hardware
- / Flat-panel displays
- / Set-top box
- / IP CAM
- / 5G base station & infrastructure
- / EV electric vehicle

■ CONFIGURATIONS

- / Cartridges: 30ml, 55ml, 330ml
- / Bucket: 1kg, 25kg

■ PRESERVATION

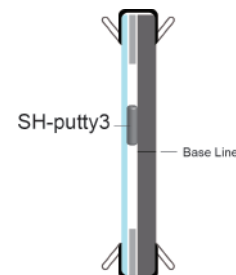
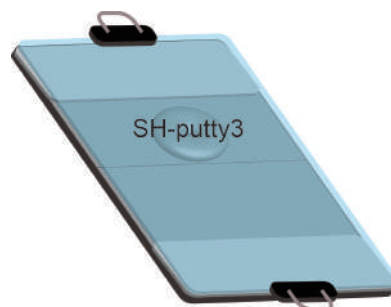
It can be preserved for 60 months under the condition of unopened and under room temperature 25°C.

■ TYPICAL PROPERTIES

PROPERTY	SH-putty3	TEST METHOD	UNIT
Color	Gray	Visual	-
Resin base	Silicone	-	-
Viscosity	17000	DIN 53018	Pa.s
Density	3.4	ASTM D792	g/cm ³
Application temperature	-60~180	-	°C
Bond line thickness	100~3000	-	μm
Shelf life	60 months	-	-
ROHS & REACH	Compliant	-	-
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Volume resistivity	>10 ¹³	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	8.0	ASTM D5470	W/m*K
Thermal impedance@10psi	0.039	ASTM D5470	°C-in ² / W
Thermal impedance@30psi	0.035	ASTM D5470	°C-in ² / W
Thermal impedance@50psi	0.031	ASTM D5470	°C-in ² / W

■ VERTICAL RELIABILITY

Using 3.0mm pad as a gap control, put the putty between the aluminum and the glass panel mark the initial position. Then, place it in the oven with 125°C for 1,000 hours and observe its displacement after reliability test



Material no dropped or changed after high temperature aging testing

S-putty5-s

Thermal Conductive Putty

LiPOLY S-putty5-s is a one-part dispensable material with thermal conductivity 10.0 W/m*K. High deformation can fill small air gaps perfectly to remove tolerance. It also can overcome overflow and drying problems to increase the thermal conductivity. S-putty5-s is a great alternative to thermal grease and ideally suited for dispensing using the dispensing robot.

■ FEATURES

- / Thermal conductivity:10.0 W/m*K
- / Bond line thickness:200-3000μm
- / Designed to remove manufacturing tolerances
- / Does not produce stress on delicate components
- / No vertical flow
- / Dispensable for serial manufacture
- / For any high compression and low stress application

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / High speed mass storage drives
- / Telecommunication hardware
- / Flat-panel displays
- / Set-top box
- / IP CAM

■ CONFIGURATIONS

- / Cartridges: 30ml, 55ml, 330ml
- / Bucket: 1kg, 25kg

■ PRESERVATION

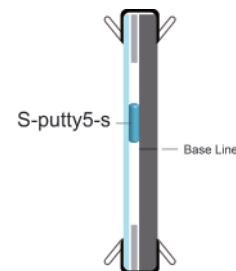
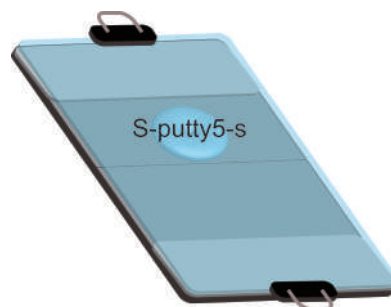
It can be preserved for 60 months under the condition of unopened and under room temperature 25°C.

■ TYPICAL PROPERTIES

PROPERTY	S-putty5-s	TEST METHOD	UNIT
Color	Blue	Visual	-
Resin base	Silicone	-	-
Viscosity	20000	DIN 53018	Pa.s
Density	3.3	ASTM D792	g/cm ³
Application temperature	-60~180	-	°C
Bond line thickness	200~3000	-	μm
Shelf life	60 months	-	-
ROHS & REACH	Compliant	-	-
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Volume resistivity	>10 ¹³	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	10.0	ASTM D5470	W/m*K
Thermal impedance@10psi	0.035	ASTM D5470	°C-in ² / W
Thermal impedance@30psi	0.031	ASTM D5470	°C-in ² / W
Thermal impedance@50psi	0.027	ASTM D5470	°C-in ² / W

■ VERTICAL RELIABILITY

Using 3.0mm pad as a gap control, put the putty between the aluminum and the glass panel mark the initial position. Then, place it in the oven with 125°C for 1,000 hours and observe its displacement after reliability test



Material no dropped or changed after high temperature aging testing

PK223DM

Two-Part Thermal Conductive Gap Filler

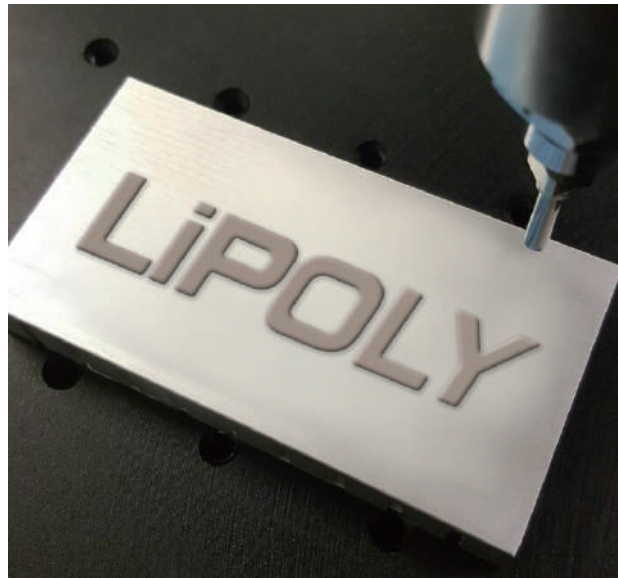
LiPOLY PK223DM is a two-part liquid gap filler, fast cured at room temperature or elevated temperature. With a thermal conductivity of 2.2 W/m*K, PK223DM provides high thermal conductivity and low thermal impedance. It is ideally suited for dispensing using the dispensing robot or by syringe.

■ FEATURES

- / Thermal conductivity: 2.2 W/m*K
- / Fast curing in normal atmospheric temperature
- / Great reliability
- / Great sealing in low pressure

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / Electric vehicle & Automotive battery
- / 5G base station & infrastructure
- / EV electric vehicle



■ CONFIGURATIONS

- / Cartridges: 50ml, 400ml
- / Other special and custom sizes are available upon request

■ DISPENSING INSTRUCTIONS

Use the disposable plastic static mixing nozzles to mix parts A and B together to the desired ratio. Liquid gap fillers can be dispensed using an automatic dispensing machine or a manual dispensing tool that can be provided by LiPOLY upon request/purchase. The disposable plastic static mixing nozzles cannot be re-used.

■ STORAGE

Two-part liquid gap fillers should be stored in climate-controlled environments at or below 25°C. Keep liquid gap fillers away from direct sunlight and away from high-temperature environments.

■ PRESERVATION

It can be preserved for 24 months under the condition of unopened and under room temperature 25°C.

■ PRECAUTIONS

The two-part liquid gap filler may not cure properly if it comes into contact with certain substances, including amine, sulfur, organophosphorus compounds, and organotin compounds. Please avoid the following substances when handling: (N, P, S, Sn, Pb, Hg, Sb, Bi, As) Ensure a clean mixing container is used (e.g.: paper cup or plastic cup) before injecting the A and B parts into the mixing container. The plasticizer, wax from the cups, varnish or the epoxy from the oven may contaminate the A and B parts. You are reminded to pre-test the gap filler before using it.

■ PLEASE NOTE

It's recommended that the diameter of mixing tube outlet should be 3mm at least, which can solve the possible problem of poor fluidity caused by ambient temperature.

■ TYPICAL PROPERTIES

PROPERTY	PK223DM	TEST METHOD	UNIT
Color	White (A part) Gray (B part)	Visual	-
Solid content	100% (Two-part : 100:100)	-	-
Viscosity A	120	ISO 3219	Pa.s
Viscosity B	110	ISO 3219	Pa.s
Density	2.2	ASTM D792	g/cm ³
Shelf life	24 months	-	-
ROHS & REACH	Compliant	-	-
SOLID(AFTER CURE)			
Thermal conductivity	2.2	ASTM D5470	W/m*K
Thermal impedance@10mils BLT	0.294	ASTM D5470	°C-in ² / W
Thermal impedance@20mils BLT	0.571	ASTM D5470	°C-in ² / W
Thermal impedance@30mils BLT	0.710	ASTM D5470	°C-in ² / W
Hardness	50	ASTM D2240	Shore OO
Working temp (long term)	-60 ~ 200	-	°C
Operating ambient temp	20 ~ 30	-	°C
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 ¹⁰	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
CURE SCHEDULE			
Pot life @ 25°C	10~15	By LiPOLY	min
Surface dry @ 25°C	20~25	By LiPOLY	min
Cure @ 25°C	30~35	By LiPOLY	min
Cure @ 100°C	72	By LiPOLY	sec
Cure @ 120°C	20	By LiPOLY	sec

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PK404DM

Two-Part Thermal Conductive Gap Filler

LiPOLY PK404DM is a two-part liquid gap filler, fast cured at room temperature or elevated temperature. With a thermal conductivity of 3.6 W/m*K, PK404DM provides high thermal conductivity and low thermal impedance. It is ideally suited for dispensing using the dispensing robot or by syringe.

■ FEATURES

- / Thermal conductivity: 3.6 W/m*K
- / Fast curing in normal atmospheric temperature
- / Great reliability
- / Great sealing in low pressure

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / Electric vehicle & Automotive battery
- / 5G base station & infrastructure
- / EV electric vehicle

■ CONFIGURATIONS

- / Cartridges: 50ml, 400ml
- / Other special and custom sizes are available upon request

■ DISPENSING INSTRUCTIONS

Use the disposable plastic static mixing nozzles to mix parts A and B together to the desired ratio. Liquid gap fillers can be dispensed using an automatic dispensing machine or a manual dispensing tool that can be provided by LiPOLY upon request/purchase. The disposable plastic static mixing nozzles cannot be re-used.

■ STORAGE

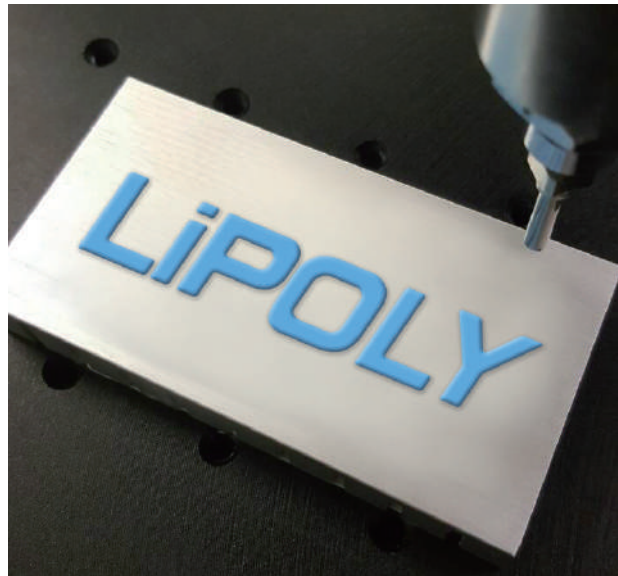
Two-part liquid gap fillers should be stored in climate-controlled environments at or below 25°C. Keep liquid gap fillers away from direct sunlight and away from high-temperature environments.

■ PRESERVATION

It can be preserved for 24 months under the condition of unopened and under room temperature 25°C.

■ PRECAUTIONS

The two-part liquid gap filler may not cure properly if it comes into contact with certain substances, including amine, sulfur, organophosphorus compounds, and organotin compounds. Please avoid the following substances when handling: (N, P, S, Sn, Pb, Hg, Sb, Bi, As) Ensure a clean mixing container is used (e.g.: paper cup or plastic cup) before injecting the A and B parts into the mixing container. The plasticizer, wax from the cups, varnish or the epoxy from the oven may contaminate the A and B parts. You are reminded to pre-test the gap filler before using it.



■ PLEASE NOTE

It's recommended that the diameter of mixing tube outlet should be 3mm at least, which can solve the possible problem of poor fluidity caused by ambient temperature.

■ TYPICAL PROPERTIES

PROPERTY	PK404DM	TEST METHOD	UNIT
Color	Blue (A part) White (B part)	Visual	-
Solid content	100% (Two-part : 100:100)	-	-
Viscosity A	47	ISO 3219	Pa.s
Viscosity B	48	ISO 3219	Pa.s
Density	3.0	ASTM D792	g/cm ³
Shelf life	24 months	-	-
ROHS & REACH	Compliant	-	-
SOLID(AFTER CURE)			
Thermal conductivity	3.6	ASTM D5470	W/m*K
Thermal impedance@10mils BLT	0.252	ASTM D5470	°C-in ² / W
Thermal impedance@20mils BLT	0.471	ASTM D5470	°C-in ² / W
Thermal impedance@30mils BLT	0.730	ASTM D5470	°C-in ² / W
Hardness	80	ASTM D2240	Shore OO
Working temp (long term)	-60 ~ 200	-	°C
Operating ambient temp	20 ~ 30	-	°C
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 ¹⁰	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
CURE SCHEDULE			
Pot life @ 25°C	10~15	By LiPOLY	min
Surface dry @ 25°C	20~25	By LiPOLY	min
Cure @ 25°C	25~30	By LiPOLY	min
Cure @ 100°C	60	By LiPOLY	sec
Cure @ 120°C	20	By LiPOLY	sec

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PK605DM

Two-Part Thermal Conductive Gap Filler

LiPOLY PK605DM is a two-part liquid gap filler, fast cured at room temperature or elevated temperature. With a thermal conductivity of 5.0 W/m*K, PK605DM provides high thermal conductivity and low thermal impedance. It is ideally suited for dispensing using the dispensing robot or by syringe.

■ FEATURES

- / Thermal conductivity: 5.0 W/m*K
- / Fast curing in normal atmospheric temperature
- / Great reliability
- / Great sealing in low pressure

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / Electric vehicle & Automotive battery
- / 5G base station & infrastructure
- / EV electric vehicle

■ CONFIGURATIONS

- / Cartridges: 50ml, 400ml
- / Other special and custom sizes are available upon request

■ DISPENSING INSTRUCTIONS

Use the disposable plastic static mixing nozzles to mix parts A and B together to the desired ratio. Liquid gap fillers can be dispensed using an automatic dispensing machine or a manual dispensing tool that can be provided by LiPOLY upon request/purchase. The disposable plastic static mixing nozzles cannot be re-used.

■ STORAGE

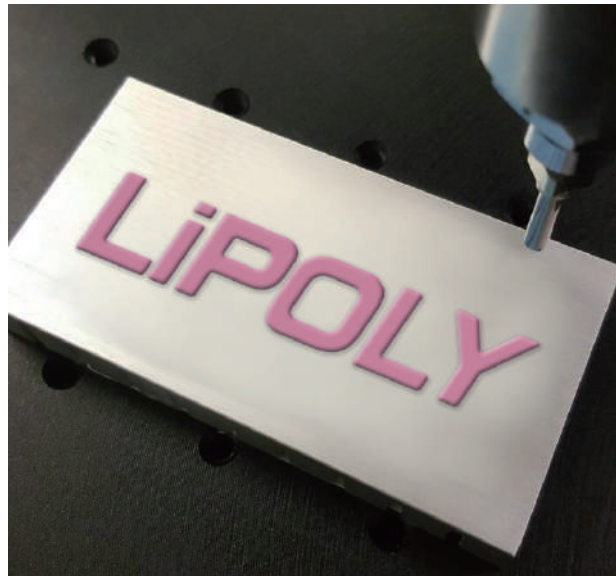
Two-part liquid gap fillers should be stored in climate-controlled environments at or below 25°C. Keep liquid gap fillers away from direct sunlight and away from high-temperature environments.

■ PRESERVATION

It can be preserved for 24 months under the condition of unopened and under room temperature 25°C.

■ PRECAUTIONS

The two-part liquid gap filler may not cure properly if it comes into contact with certain substances, including amine, sulfur, organophosphorus compounds, and organotin compounds. Please avoid the following substances when handling: (N, P, S, Sn, Pb, Hg, Sb, Bi, As) Ensure a clean mixing container is used (e.g.: paper cup or plastic cup) before injecting the A and B parts into the mixing container. The plasticizer, wax from the cups, varnish or the epoxy from the oven may contaminate the A and B parts. You are reminded to pre-test the gap filler before using it.



■ PLEASE NOTE

It's recommended that the diameter of mixing tube outlet should be 3mm at least, which can solve the possible problem of poor fluidity caused by ambient temperature.

■ TYPICAL PROPERTIES

PROPERTY	PK605DM	TEST METHOD	UNIT
Color	Red (A part) White (B part)	Visual	-
Solid content	100% (Two-part : 100:100)	-	-
Viscosity A	110	ISO 3219	Pa.s
Viscosity B	80	ISO 3219	Pa.s
Density	3.3	ASTM D792	g/cm ³
Shelf life	24 months	-	-
ROHS & REACH	Compliant	-	-
SOLID(AFTER CURE)			
Thermal conductivity	5.0	ASTM D5470	W/m*K
Thermal impedance@10mils BLT	0.092	ASTM D5470	°C-in ² / W
Thermal impedance@20mils BLT	0.171	ASTM D5470	°C-in ² / W
Thermal impedance@30mils BLT	0.254	ASTM D5470	°C-in ² / W
Hardness	85	ASTM D2240	Shore OO
Working temp (long term)	-60 ~ 200	-	°C
Operating ambient temp	20 ~ 30	-	°C
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
CURE SCHEDULE			
Pot life @ 25°C	10~15	By LiPOLY	min
Surface dry @ 25°C	20~25	By LiPOLY	min
Cure @ 25°C	25~30	By LiPOLY	min
Cure @ 100°C	40	By LiPOLY	sec
Cure @ 120°C	10	By LiPOLY	sec

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PK700DM

Two-Part Thermal Conductive Gap Filler

LiPOLY PK700DM is a two-part liquid gap filler, fast cured at room temperature or elevated temperature. With a thermal conductivity of 7.0 W/m*K, PK700DM provides high thermal conductivity and low thermal impedance. It is ideally suited for dispensing using the dispensing robot or by syringe.

■ FEATURES

- / Thermal conductivity: 7.0 W/m*K
- / Fast curing in normal atmospheric temperature
- / Great reliability
- / Great sealing in low pressure

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / Electric vehicle & Automotive battery
- / 5G base station & infrastructure
- / EV electric vehicle

■ CONFIGURATIONS

- / Cartridges: 50ml, 400ml
- / Other special and custom sizes are available upon request

■ DISPENSING INSTRUCTIONS

Use the disposable plastic static mixing nozzles to mix parts A and B together to the desired ratio. Liquid gap fillers can be dispensed using an automatic dispensing machine or a manual dispensing tool that can be provided by LiPOLY upon request/purchase. The disposable plastic static mixing nozzles cannot be re-used.

■ STORAGE

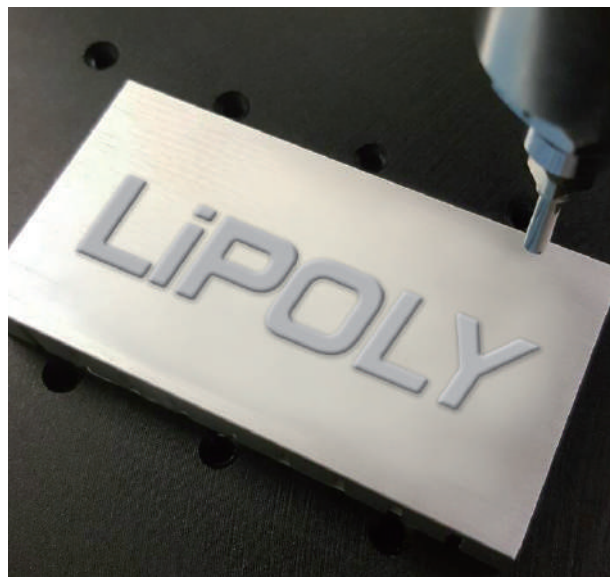
Two-part liquid gap fillers should be stored in climate-controlled environments at or below 25°C. Keep liquid gap fillers away from direct sunlight and away from high-temperature environments.

■ PRESERVATION

It can be preserved for 24 months under the condition of unopened and under room temperature 25°C.

■ PRECAUTIONS

The two-part liquid gap filler may not cure properly if it comes into contact with certain substances, including amine, sulfur, organophosphorus compounds, and organotin compounds. Please avoid the following substances when handling: (N, P, S, Sn, Pb, Hg, Sb, Bi, As) Ensure a clean mixing container is used (e.g.: paper cup or plastic cup) before injecting the A and B parts into the mixing container. The plasticizer, wax from the cups, varnish or the epoxy from the oven may contaminate the A and B parts. You are reminded to pre-test the gap filler before using it.



■ PLEASE NOTE

It's recommended that the diameter of mixing tube outlet should be 3mm at least, which can solve the possible problem of poor fluidity caused by ambient temperature.

■ TYPICAL PROPERTIES

PROPERTY	PK700DM	TEST METHOD	UNIT
Color	Gray (A part) White (B part)	Visual	-
Solid content	100% (Two-part : 100:100)	-	-
Viscosity A	315	ISO 3219	Pa.s
Viscosity B	285	ISO 3219	Pa.s
Density	2.8	ASTM D792	g/cm ³
Shelf life	24 months	-	-
ROHS & REACH	Compliant	-	-
SOLID(AFTER CURE)			
Thermal conductivity	7.0	ASTM D5470	W/m*K
Thermal impedance@10mils BLT	0.058	ASTM D5470	°C-in ² / W
Thermal impedance@20mils BLT	0.115	ASTM D5470	°C-in ² / W
Thermal impedance@30mils BLT	0.170	ASTM D5470	°C-in ² / W
Hardness	60	ASTM D2240	Shore OO
Working temp (long term)	-60 ~ 200	-	°C
Operating ambient temp	20 ~ 30	-	°C
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
CURE SCHEDULE			
Pot life @ 25°C	20~30	By LiPOLY	min
Surface dry @ 25°C	30~40	By LiPOLY	min
Cure @ 25°C	40~50	By LiPOLY	min
Cure @ 100°C	40	By LiPOLY	sec
Cure @ 120°C	10	By LiPOLY	sec

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TPS586/TPS5868

Two-Part Thermal Conductive Sealing Glue

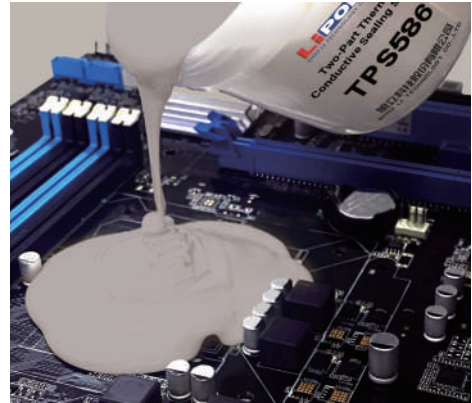
LiPOLY TPS586/5868 is a two-part sealing gap filler, provides low viscosity and high fluidity. The high deformation material, which can filling the gap closely, cover the tolerance, and has outstanding conductivity, makes is suitable for filling the peculiar gap.

■ FEATURES

- / Thermal conductivity: 1.5/3.0 W/m*K
- / Two-parts package and easy to use
- / Waterproof and air-tight
- / Thermally conductive vibration dampening

■ TYPICAL APPLICATION

- / Automotive electronics / Telecommunications
- / Computer and peripherals / 5G base station & infrastructure
- / Between any heat-generating component and a heat sink
- / EV electric vehicle



■ PRESERVATION

- / It can be preserved for 24 months under the condition of unopened and under room temperature 25°C

■ PRECAUTIONS

- / TPS586/TPS5868 If the interface has organic compounds such as Nitrogen, Phosphorous, Sulfur etc., and heavy metals ionic compound such as Tin, Lead, Mercury, Antimony, Bismuth, Arsenic etc., and Organometallic-salts etc., which will cause the gel incomplete curing even will be non-curved.

■ TYPICAL PROPERTIES

PROPERTY	TPS586	TPS5868	TEST METHOD	UNIT
Color	White (A part) Gray (B part)	White (A part) Gray (B part)	Visual	-
Resin base	Silicone	Silicone	-	-
A:B	100:100	100:100	-	-
Viscosity	5.0	8.0	ISO 3219	Pa.s
Density	2.1	2.8	ASTM D792	g/cm ³
Application temperature	-60~180	-60~180	-	°C
Pot life	25°C / 1.5 hr	25°C / 1.0 hr	By LiPOLY	-
Surface dry	25°C / 2.0 hr	25°C / 1.5 hr	By LiPOLY	-
Curing condition 1	25°C / 2.5 hr	25°C / 2.0 hr	By LiPOLY	-
Curing condition 2	70°C / 25 min	70°C / 20 min	By LiPOLY	-
Curing condition 3	120°C / 1 min	120°C / 1 min	By LiPOLY	-
Hardness	6	5	ASTM D2240	Shore A
Shelf life	24 months	24 months	-	-
ROHS & REACH	Compliant	Compliant	-	-
ELECTRICAL				
Dielectric breakdown	14	14	ASTM D149	KV/mm
Volume resistivity	>10 ¹²	>10 ¹²	ASTM D257	Ohm-m
THERMAL				
Thermal conductivity	1.5	3.0	ASTM D5470	W/m*K

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TPS589

Two-Part Thermal Conductive Sealing Glue

LiPOLY TPS589 is a two-part sealing gap filler, provides low viscosity and high fluidity. The high deformation material, which can be filling the gap closely, cover the tolerance, and has outstanding conductivity, makes is suitable for filling the peculiar gap.

■ FEATURES

- / Thermal conductivity: 0.8 W/m*K
- / Two-parts package and easy to use
- / Waterproof and air-tight
- / Thermally conductive vibration dampening

■ TYPICAL APPLICATION

- / Automotive electronics
- / Telecommunications
- / Computer and peripherals
- / Between any heat-generating component and a heat sink
- / 5G base station & infrastructure
- / EV electric vehicle

■ PRESERVATION

- / It can be preserved for 24 months under the condition of unopened and under room temperature 25°C.

■ PRECAUTIONS

- / TPS589 The principle of moisture hardening is to harden by reacting with moisture in the air at room temperature. The hardening process starts from the surface in contact with the air and hardens in the deep direction, so the hardening process is a little slow. The speed of hardening is related to temperature and humidity. When there is not enough water vapor in the use environment to react, it may not be completely hardened.

■ TYPICAL PROPERTIES

PROPERTY	TPS589	TEST METHOD	UNIT
Color	White	Visual	-
Resin base	Silicone	-	-
A:B	100:3	-	-
Viscosity	5.0	ISO 3219	Pa.s
Density	1.8	ASTM D792	g/cm ³
Application temperature	-60~180	-	°C
Curing condition	25°C / 7day	By LiPOLY	-
Hardness	50	ASTM D2240	Shore A
Shelf life	24 months	-	-
ROHS & REACH	Compliant	-	-
ELECTRICAL			
Dielectric breakdown	14	ASTM D149	KV/mm
Volume resistivity	>10 ¹¹	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	0.8	ASTM D5470	W/m*K

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TPS31&TPS32

Lightweight Two-Part Thermal Conductive Sealing Glue

LiPOLY's TPS31/TPS32 is a low-density, two-part compound silicone base thermal conductive sealing material. It's low viscosity and excellent fluidity can tightly fill the gaps of electrical components and cover the tolerances between components. It has excellent thermal conductivity, low density and insulation properties.

■ FEATURES

- / Lightweight, Low Density, Thermal Conductivity 0.55 & 1.5 W/m*K
- / Medium-to-high hardness silicone material with excellent insulation and weather resistance
- / Suitable for automatic dispensing machine
- / TPS31 Moisture absorb hardening reaction at room temperature.
- / TPS32 Hardened at room temperature, also can be heated to accelerate the hardening reaction.



■ TYPICAL APPLICATION

- / Heat Dissipation & lightweight applications, such as Automotive electronic devices, Mobile communication device, Drone & aircraft, Sports and leisure electronic products, Portable game consoles, VR devices and etc.
- / 5G base station & infrastructure / EV electric vehicle

■ PRESERVATION

- / It can be preserved for 24 months under the condition of unopened and under room temperature 25°C.

■ PRECAUTIONS

- / TPS32 If the interface has organic compounds such as Nitrogen, Phosphorous, Sulfur etc., and heavy metals ionic compound such as Tin, Lead, Mercury, Antimony, Bismuth, Arsenic etc., and Organometallic-salts etc., which will cause the gel incomplete curing even will be non-cured.

■ TYPICAL PROPERTIES

PROPERTY	TPS31	TPS32	TEST METHOD	UNIT
Color	White (A part) Translucent (B part)	White(A part) Black(B part)	Visual	-
Resin Base	Silicone	Silicone	-	-
A:B	100:10	100:100	-	-
Viscosity	1.9	3.2	ISO 3219	Pa.s
Density	1.35	1.72	ASTM D792	g/cm ³
Application temperature	-60~180	-60~180	-	°C
Working Time	25°C/30 min	25°C/1 hrs	By LiPOLY	-
Curing Condition 2	25°C/48 hrs	80°C/1 hrs	By LiPOLY	-
Curing Condition 3	-	25°C/24 hrs	By LiPOLY	-
Hardness	55	65	ASTM D2240	Shore A
Shelf Life	24 months	24 months	-	-
ROHS & REACH	Compliant	Compliant	-	-
ELECTRICAL				
Dielectric breakdown	10	9	ASTM D149	KV/mm
Volume resistivity	>10 ¹³	>10 ¹³	ASTM D257	Ohm-m
THERMAL				
Thermal conductivity	0.55	1.5	ASTM D5470	W/m*K

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TIM12

Thermal Conductive Die Attach Adhesive

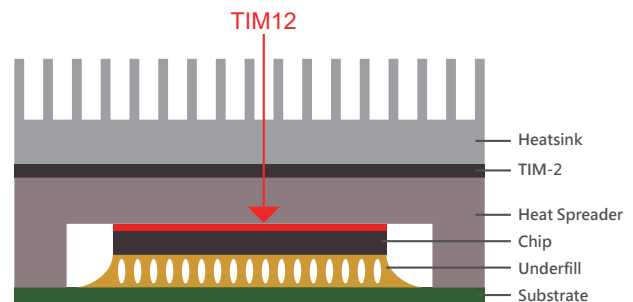
LiPOLY's TIM12 is a two-part compound silicone base thermal conductive adhesive gel, which is mainly designed to provide efficient thermal transfer for the cooling of chip packaging. The high deformation properties perfectly fill small air gaps to eliminate tolerances. It's ideally suited for manual dispensing applicator and dispensing robot. Friendly design escape from high cost of cold-chain transportation and freeze preservation.)

■ FEATURES

- / Excellent thermal conductivity 2.0 W/m*K
- / No freeze preservation required.
- / Dispensable for serial manufacture
- / Adhesive for IC packaging design

■ TYPICAL APPLICATION

- / Designed to provide efficient thermal transfer for the cooling of chip packaging as TIM-1.
- / 5G base station & infrastructure
- / EV electric vehicle



■ CONFIGURATIONS

- / Cartridges: 50ml

■ DISPENSING INSTRUCTIONS

Use the disposable plastic static mixing nozzles to mix parts A and B together to the desired ratio. Liquid gap fillers can be dispensed using an automatic dispensing machine or a manual dispensing tool that can be provided by LiPOLY upon request/purchase. The disposable plastic static mixing nozzles cannot be re-used.

■ STORAGE

Two-part liquid gap fillers should be stored in climate-controlled environments at or below 25°C. Keep liquid gap fillers away from direct sunlight and away from high-temperature environments.

■ PRESERVATION

It can be preserved for 24 months under the condition of unopened and under room temperature 25°C.

■ PRECAUTIONS

The two-part liquid gap filler may not cure properly if it comes into contact with certain substances, including amine, sulfur, organophosphorus compounds, and organotin compounds. Please avoid the following substances when handling: (N, P, S, Sn, Pb, Hg, Sb, Bi, As) Ensure a clean mixing container is used (e.g.: paper cup or plastic cup) before injecting the A and B parts into the mixing container. The plasticizer, wax from the cups, varnish or the epoxy from the oven may contaminate the A and B parts. You are reminded to pre-test the gap filler before using it.

■ PLEASE NOTE

It's recommended that the diameter of mixing tube outlet should be 3mm at least, which can solve the possible problem of poor fluidity caused by ambient temperature.

■ TYPICAL PROPERTIES

PROPERTY	TIM12	TEST METHOD	UNIT
Color	Gray (A part) White (B part)	Visual	-
Resin base	Silicone	-	-
Form	Grease	Visual	-
Viscosity A	190	ISO 3219	Pa.s
Viscosity B	150	ISO 3219	Pa.s
Density	2.7	ASTM D792	g/cm ³
Application temperature	-50~180	-	°C
Working time	24 @ RT	By LiPOLY	hrs
Cure conditions	125°C / 90 mins	By LiPOLY	-
Volatile content	< 0.4	150°C x 24h	%
BLT	27	-	µm
Elongation	170	ASTM D412	%
Adhesive strength	0.64	-	-
ELECTRICAL			
Dielectric breakdown	25	ASTM D149	KV/mm
Surface resistivity	>10 ¹³	ASTM D257	Ohm
Volume resistivity	>10 ¹³	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	2.0	ASTM D5470	W/m*K

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TIM14

Thermal Conductive Die Attach Adhesive

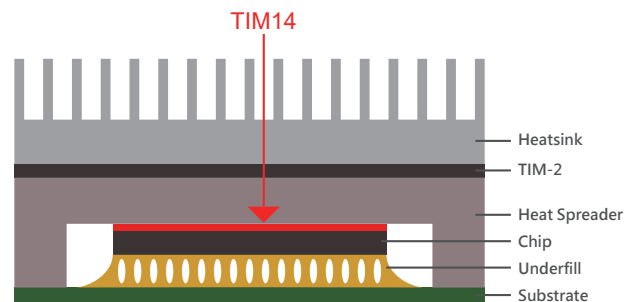
LiPOLY's TIM14 is a two-part compound silicone base thermal conductive adhesive gel, which is mainly designed to provide efficient thermal transfer for the cooling of chip packaging. The high deformation properties perfectly fill small air gaps to eliminate tolerances. It's ideally suited for manual dispensing applicator and dispensing robot. Friendly design escape from high cost of cold-chain transportation and freeze preservation.)

■ FEATURES

- / Excellent thermal conductivity 4.0 W/m*K
- / No freeze preservation required
- / Dispensable for serial manufacture
- / Adhesive for IC packaging design

■ TYPICAL APPLICATION

- / Designed to provide efficient thermal transfer for the cooling of chip packaging as TIM-1.
- / 5G base station & infrastructure
- / EV electric vehicle



■ CONFIGURATIONS

- / Cartridges: 50ml

■ DISPENSING INSTRUCTIONS

Use the disposable plastic static mixing nozzles to mix parts A and B together to the desired ratio. Liquid gap fillers can be dispensed using an automatic dispensing machine or a manual dispensing tool that can be provided by LiPOLY upon request/purchase. The disposable plastic static mixing nozzles cannot be re-used.

■ STORAGE

Two-part liquid gap fillers should be stored in climate-controlled environments at or below 25°C. Keep liquid gap fillers away from direct sunlight and away from high-temperature environments.

■ PRESERVATION

It can be preserved for 24 months under the condition of unopened and under room temperature 25°C.

■ PRECAUTIONS

The two-part liquid gap filler may not cure properly if it comes into contact with certain substances, including amine, sulfur, organophosphorus compounds, and organotin compounds. Please avoid the following substances when handling: (N, P, S, Sn, Pb, Hg, Sb, Bi, As) Ensure a clean mixing container is used (e.g.: paper cup or plastic cup) before injecting the A and B parts into the mixing container. The plasticizer, wax from the cups, varnish or the epoxy from the oven may contaminate the A and B parts. You are reminded to pre-test the gap filler before using it.

■ PLEASE NOTE

It's recommended that the diameter of mixing tube outlet should be 3mm at least, which can solve the possible problem of poor fluidity caused by ambient temperature.

■ TYPICAL PROPERTIES

PROPERTY	TIM14	TEST METHOD	UNIT
Color	Gray (A part) White (B part)	Visual	-
Resin base	Silicone	-	-
Form	Grease	Visual	-
Viscosity A	380	ISO 3219	Pa.s
Viscosity B	380	ISO 3219	Pa.s
Density	3.0	ASTM D792	g/cm ³
Application temperature	-50~180	-	°C
Working time	24 @ RT	By LiPOLY	hrs
Cure conditions	125°C / 90 mins	By LiPOLY	-
Volatile content	< 0.4	150°C x 24h	%
BLT	27	-	µm
Elongation	110	ASTM D412	%
Adhesive strength	3.5	-	kgf/cm ²
ELECTRICAL			
Dielectric breakdown	25	ASTM D149	KV/mm
Surface resistivity	>10 ¹³	ASTM D257	Ohm
Volume resistivity	>10 ¹³	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	4.0	ASTM D5470	W/m*K

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D2000

Two-Part Curable Thermal Grease

LiPOLY D2000 is a two-part curable thermal grease. It can be cured quickly at room temperature and high temperature without pump-out effect. It is a highly reliable material. With a thermal conductivity of 2.0 W/m*K, has low thermal resistance. It is ideally suited for dispensing using the dispensing robot or by syringe.

■ FEATURES

- / Thermal conductivity:2.0 W/m*K
- / Cured and Re-workable thermal Grease.
- / Without Pump-out and Dry out concern.
- / Great reliability
- / Low thermal resistance and thinner Bond Line Thickness.

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / Mobile devices
- / 5G base station & infrastructure
- / EV electric vehicle



■ CONFIGURATIONS

- / Cartridges: 50ml, 400ml
- / Other special and custom sizes are available upon request

■ DISPENSING INSTRUCTIONS

Use the disposable plastic static mixing nozzles to mix parts A and B together to the desired ratio. Liquid gap fillers can be dispensed using an automatic dispensing machine or a manual dispensing tool that can be provided by LiPOLY upon request/purchase. The disposable plastic static mixing nozzles cannot be re-used.

■ STORAGE

Two-part liquid gap fillers should be stored in climate-controlled environments at or below 25°C. Keep liquid gap fillers away from direct sunlight and away from high-temperature environments.

■ PRESERVATION

It can be preserved for 24 months under the condition of unopened and under room temperature 25°C.

■ PRECAUTIONS

The two-part liquid gap filler may not cure properly if it comes into contact with certain substances, including amine, sulfur, organophosphorus compounds, and organotin compounds. Please avoid the following substances when handling: (N, P, S, Sn, Pb, Hg, Sb, Bi, As) Ensure a clean mixing container is used (e.g.: paper cup or plastic cup) before injecting the A and B parts into the mixing container. The plasticizer, wax from the cups, varnish or the epoxy from the oven may contaminate the A and B parts. You are reminded to pre-test the gap filler before using it.

■ PLEASE NOTE

It's recommended that the diameter of mixing tube outlet should be 3mm at least, which can solve the possible problem of poor fluidity caused by ambient temperature.

■ TYPICAL PROPERTIES

PROPERTY	D2000	TEST METHOD	UNIT
Color	White (A part) Gray (B part)	Visual	-
Solid content	100% (Two-part : 100:100)	-	-
Viscosity A	95	ISO 3219	Pa.s
Viscosity B	95	ISO 3219	Pa.s
Density	2.8	ASTM D792	g/cm ³
Shelf life	24 months	-	-
ROHS & REACH	Compliant	-	-
SOLID(AFTER CURE)			
Thermal conductivity	2.0	ASTM D5470	W/m*K
Thermal impedance@2mils BLT	0.042	ASTM D5470	°C-in ² / W
Bond line thickness	50	-	µm
Hardness	75	ASTM D2240	Shore OO
Heat capacity	1.0	ASTM E1269	J/g*K
Volume resistivity	>10 ¹²	ASTM D257	Ohm-m
Dielectric breakdown	14	ASTM D149	KV/mm
Working temp (long term)	-60 ~ 200	-	°C
Working temp (short term)	288	-	°C
Operating ambient temp	20 ~ 30	-	°C
CURE SCHEDULE			
Pot life @ 25°C	10~15	By LiPOLY	min
Surface dry @ 25°C	25~30	By LiPOLY	min
Cure @ 25°C	35~40	By LiPOLY	min
Cure @ 100°C	80	By LiPOLY	sec
Cure @ 120°C	30	By LiPOLY	sec

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TT3000

Nano Thermal Grease

LiPOLY TT3000 is a Nano type thermal interface material based on a unique formula. TT3000's formulation is solvent-free. We used a unique silicone oil which interacts with thermally conductive fillers, making the compounds extremely stable, preventing pump-out problems and other common failure mechanisms. TT3000 has high thermal conductivity, low thermal resistance, improving the components performance as well as the product lifecycle.

■ FEATURES

- / Thermal conductivity:6.0 W/m*K
- / Excellent thermal conductivity
- / Stable and homogeneous compound to ensure thermal performance
- / Formula can fill the gap at low pressure
- / High stability and reliability
- / Solvent-free formula
- / The product is qualified for ROHS and REACH

■ TYPICAL APPLICATION

- / CPU and chip coolers
- / Switching power supplies
- / Between any heat-generating component and heat Sink
- / 5G base station & infrastructure
- / EV electric vehicle

■ CONFIGURATIONS

- / Cartridges: 50ml
- / Tinplate Can: 1kg
- / Other special and custom sizes are available upon request

■ PRESERVATION

It can be preserved for 60 months under the condition of unopened and under room temperature 25°C.

PROPERTY	TT3000	TEST METHOD	UNIT
Color	White	Visual	-
Resin base	Silicone	-	-
Filler	Non-Metal	-	-
Viscosity	300	ISO 3219	Pa.s
Density	3.3	ASTM D792	g/cm ³
Application temperature	-60~180	-	°C
Bond line thickness	10	-	µm
Shelf life	60 months	-	-
ROHS & REACH	Compliant	-	-
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Volume resistivity	>10 ¹²	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	6.0	ASTM D5470	W/m*K
Thermal impedance@50psi	0.007	ASTM D5470	°C-in ² / W
Thermal impedance@50psi	5.0	ASTM D5470	°C-mm ² / W



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G3380A/B/C/D

Thermal Grease Series

LiPOLY G3380 thermal interface grease has low thermal resistance and great thermal conductivity. G3380 has been used extensively in Consumer electronics and Microprocessors for their thermal control techniques. The grease can cover several coats on the component interface. When the component's temperature rises, the grease stickiness will decrease, which can moisten the interface components.

■ FEATURES

- / Thermal conductivity: 1.3 / 3.2 / 4.5 / 6.0 W/m*K
- / Low thermal impedance
- / Can be applied manually dispensed or screen printed
- / Low minimum bond line

■ TYPICAL APPLICATION

- / LED appliance
- / EV electric vehicle
- / CPU and chip coolers
- / Switching power supplies
- / 5G base station & infrastructure
- / Between any heat-generating component and heat sink

■ CONFIGURATIONS

- / Cartridges: 50ml
- / Tinplate Can: 1kg
- / Other special and custom sizes are available upon request

■ PRESERVATION

It can be preserved for 60 months under the condition of unopened and under room temperature 25°C.



PROPERTY	G3380A	G3380B	G3380C	G3380D	TEST METHOD	UNIT
Color	White	Gray	Gray	Gray	Visual	-
Resin base	Silicone	Silicone	Silicone	Silicone	-	-
Filler	Non-Metal	Non-Metal	Metal	Metal	-	-
Viscosity	16.5	130	126	136	ISO 3219	Pa.s
Density	2.2	2.7	2.0	2.0	ASTM D792	g/cm ³
Application temperature	-60~180	-60~180	-60~180	-60~180	-	°C
Bond line thickness	55	33	30	30	-	μm
Shelf life	60 months	60 months	60 months	60 months	-	-
ROHS & REACH	Compliant	Compliant	Compliant	Compliant	-	-

ELECTRICAL						
Dielectric breakdown	14	11	N/A	N/A	ASTM D149	KV/mm
Volume resistivity	>10 ¹¹	>10 ¹¹	N/A	N/A	ASTM D257	Ohm-m
THERMAL						
Thermal conductivity	1.3	3.2	4.5	6.0	ASTM D5470	W/m*K
Thermal impedance@50psi	0.05	0.03	0.02	0.01	ASTM D5470	°C-in ² / W
Thermal impedance@50psi	32.2	22.5	12.9	6.0	ASTM D5470	°C-mm ² / W

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G3380A/B/K/T

Thermal Grease Series

LiPOLY G3380 thermal interface grease has low thermal resistance and great thermal conductivity. G3380 has been used extensively in Consumer electronics and Microprocessors for their thermal control techniques. The grease can cover several coats on the component interface. When the component's temperature rises, the grease stickiness will decrease, which can moisten the interface components.

■ FEATURES

- / Thermal conductivity: 1.3 / 3.2 / 4.5 / 6.0 W/m*K
- / Low thermal impedance
- / Can be applied manually dispensed or screen printed
- / Low minimum bond line

■ TYPICAL APPLICATION

- / LED appliance
- / EV electric vehicle
- / CPU and chip coolers
- / Switching power supplies
- / 5G base station & infrastructure
- / Between any heat-generating component and heat sink

■ CONFIGURATIONS

- / Cartridges: 50ml
- / Tinplate Can: 1kg
- / Other special and custom sizes are available upon request

■ PRESERVATION

It can be preserved for 60 months under the condition of unopened and under room temperature 25°C.



PROPERTY	G3380A	G3380B	G3380K	G3380T	TEST METHOD	UNIT
Color	White	Gray	Gray	Gray	Visual	-
Resin base	Silicone	Silicone	Silicone	Silicone	-	-
Filler	Non-Metal	Non-Metal	Non-Metal	Non-Metal	-	-
Viscosity	16.5	130	104	181	ISO 3219	Pa.s
Density	2.2	2.7	2.6	2.7	ASTM D792	g/cm ³
Application temperature	-60~180	-60~180	-60~180	-60~180	-	°C
Bond line thickness	55	33	30	30	-	μm
Shelf life	60 months	60 months	60 months	60 months	-	-
ROHS & REACH	Compliant	Compliant	Compliant	Compliant	-	-
ELECTRICAL						
Dielectric breakdown	14	11	11	11	ASTM D149	KV/mm
Volume resistivity	>10 ¹¹	>10 ¹¹	>10 ¹¹	>10 ¹¹	ASTM D257	Ohm-m
THERMAL						
Thermal conductivity	1.3	3.2	4.5	6.0	ASTM D5470	W/m*K
Thermal impedance@50psi	0.05	0.03	0.02	0.01	ASTM D5470	°C-in ² / W
Thermal impedance@50psi	32.2	22.5	12.9	6.0	ASTM D5470	°C-mm ² / W

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Non-Silicone Thermal Conductive Putty

LiPOLY N-putty series is a non-silicon thermally conductive material without volatilization of low molecular siloxane, and low total volatile gas. With a thermal conductivity of 3.5 W/m*K, the high deformation can perfectly fill small air gaps to eliminate tolerances. It also can overcome overflow and drying problems to increase the thermal conductivity. N-putty is a great alternative to thermal grease and ideally suited for dispensing using the dispensing robot.

FEATURES

- / Thermal conductivity:3.5 W/m*K
- / Bond line thickness:100-1000μm
- / Non-silicone resin materials
- / Designed to remove manufacturing tolerances
- / Does not produce stress on delicate components
- / No vertical flow
- / Dispensable for serial manufacture
- / For any high compression and low stress application

TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / High speed mass storage drives
- / Telecommunication hardware
- / Flat-panel displays
- / Set-top box
- / IP CAM
- / 5G base station & infrastructure
- / EV electric vehicle

CONFIGURATIONS

- / Cartridges: 30ml, 55ml, 330ml
- / Bucket: 1kg, 25kg

PRESERVATION

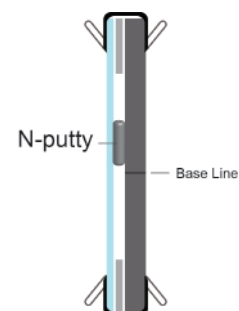
It can be preserved for 60 months under the condition of unopened and under room temperature 25°C.

TYPICAL PROPERTIES

PROPERTY	N-putty	TEST METHOD	UNIT
Color	Gray	Visual	-
Resin base	Non-Silicone	-	-
Viscosity	15000	DIN 53018	Pa.s
Density	3.0	ASTM D792	g/cm ³
Application temperature	-60~150	-	°C
Bond line thickness	100~1000	-	μm
Shelf life	60 months	-	-
ROHS & REACH	Compliant	-	-
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Volume resistivity	>10 ¹³	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	3.5	ASTM D5470	W/m*K
Thermal impedance@10psi	0.066	ASTM D5470	°C-in ² / W
Thermal impedance@30psi	0.059	ASTM D5470	°C-in ² / W
Thermal impedance@50psi	0.051	ASTM D5470	°C-in ² / W

VERTICAL RELIABILITY

Using 1.0mm pad as a gap control, put the putty between the aluminum and the glass panel mark the initial position. Then, place it in the oven with 125°C for 1,000 hours and observe its displacement after reliability test



Material no dropped or changed after high temperature aging testing

Non-Silicone Thermal Conductive Putty

LiPOLY N-putty2 series is a non-silicon thermally conductive material without volatilization of low molecular siloxane, and low total volatile gas. With a thermal conductivity of 5.0 W/m*K, the high deformation can perfectly fill small air gaps to eliminate tolerances. It also can overcome overflow and drying problems to increase the thermal conductivity. N-putty2 is a great alternative to thermal grease and ideally suited for dispensing using the dispensing robot.

■ FEATURES

- / Thermal conductivity:5.0 W/m*K
- / Bond line thickness:100-1000μm
- / Non-silicone resin materials
- / Designed to remove manufacturing tolerances
- / Does not produce stress on delicate components
- / No vertical flow
- / Dispensable for serial manufacture
- / For any high compression and low stress application

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / High speed mass storage drives
- / Telecommunication hardware
- / Flat-panel displays
- / Set-top box
- / IP CAM
- / 5G base station & infrastructure
- / EV electric vehicle

■ CONFIGURATIONS

- / Cartridges: 30ml, 55ml, 330ml
- / Bucket: 1kg, 25kg

■ PRESERVATION

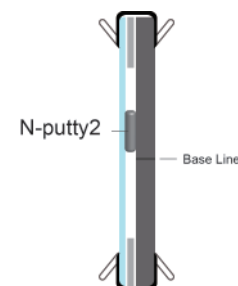
It can be preserved for 60 months under the condition of unopened and under room temperature 25°C.

■ TYPICAL PROPERTIES

PROPERTY	N-putty2	TEST METHOD	UNIT
Color	Gray	Visual	-
Resin base	Non-Silicone	-	-
Viscosity	15000	DIN 53018	Pa.s
Density	3.2	ASTM D792	g/cm ³
Application temperature	-60~150	-	°C
Bond line thickness	100~1000	-	μm
Shelf life	60 months	-	-
ROHS & REACH	Compliant	-	-
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Volume resistivity	>10 ¹³	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	5.0	ASTM D5470	W/m*K
Thermal impedance@10psi	0.045	ASTM D5470	°C-in ² / W
Thermal impedance@30psi	0.040	ASTM D5470	°C-in ² / W
Thermal impedance@50psi	0.036	ASTM D5470	°C-in ² / W

■ VERTICAL RELIABILITY

Using 1.0mm pad as a gap control, put the putty between the aluminum and the glass panel mark the initial position. Then, place it in the oven with 125°C for 1,000 hours and observe its displacement after reliability test



Material no dropped or changed after high temperature aging testing

EPDM20

Non-Silicone Two-Part Thermal Conductive Adhesive

LiPOLY EPDM20 is a silicone-free two-part liquid caulking agent that does not volatilize low-molecular-weight siloxane. With high viscosity and good adhesion, it can cure quickly at room temperature or elevated temperature. With a thermal conductivity of 2.2 W/m*K, EPDM20 provides high thermal conductivity and low thermal impedance. It is ideally suited for dispensing using the dispensing robot or by syringe.

■ FEATURES

- / Thermal conductivity: 2.2 W/m*K
- / Can be applied with dispenser
- / Room Temperature curing or heating curing
- / Low compression stress during assembly
- / Excellent adhesion to metal & PCB

■ TYPICAL APPLICATION

- / Electronic components: IC 、 CPU MOS 、 Mother Board 、 Wireless Hub Telecom Device 、 Automotive electronics 、 Computer 、 Peripherals and High frequency magnetic inductor
- / Between any heat-generating component and a heat sink.
- / 5G base station & infrastructure
- / EV electric vehicle

■ CONFIGURATIONS

- / Cartridges:50ml, 400ml
- / Other special and custom sizes are available upon request

■ PRESERVATION

It can be preserved for 24 months under the condition of unopened and under room temperature 25°C.

■ PLEASE NOTE

- / It is recommended to preheat the material to 40°C for 20 minutes or 50°C for 10 minutes if ambient temperature is less than 25°C for better extrusion and mixing.
- / It's recommended that the diameter of mixing tube outlet should be 3mm at least, which can solve the possible problem of poor fluidity caused by ambient temperature.

■ TYPICAL PROPERTIES

PROPERTY	EPDM20	TEST METHOD	UNIT
Color	Black Gray (A part) Black (B part)	Visual	-
Resin base	Epoxy	-	-
A:B	100:100	-	-
Viscosity A	265	ISO 3219	Pa.s
Viscosity B	252	ISO 3219	Pa.s
Thixotropic Index	4.1	ISO 3219	-
Density	2.7	ASTM D792	g/cm ³
Application temperature	-40~120	-	°C
Surface dry	25°C/55 min	By LiPOLY	-
Curing condition	25°C/4 hrs	By LiPOLY	-
Hardness	90	ASTM D2240	Shore A
Elongation at break	<1	ISO527	%
Tensile strength	65	ISO527	N/cm ²
Lap shear to aluminum	350	ASTM D1002	N/cm ²
Shelf life	24 months	-	-
ROHS & REACH	Compliant	-	-
ELECTRICAL			
Dielectric breakdown	14	ASTM D149	KV/mm
Volume resistivity	>10 ¹¹	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	2.2	ISO 22007-2	W/m*K



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EPDM30

Non-Silicone Two-Part Thermal Conductive Adhesive

LiPOLY EPDM30 is a silicone-free two-part liquid caulking agent that does not volatilize low-molecular-weight siloxane. With high viscosity and good adhesion, it can cure quickly at room temperature or elevated temperature. With a thermal conductivity of 3.0 W/m*K, EPDM30 provides high thermal conductivity and low thermal impedance. It is ideally suited for dispensing using the dispensing robot or by syringe.

■ FEATURES

- / Thermal conductivity: 3.0 W/m*K
- / Can be applied with dispenser
- / Room Temperature curing or heating curing
- / Low compression stress during assembly
- / Excellent adhesion to metal & PCB

■ TYPICAL APPLICATION

- / Electronic components: IC、CPU、MOS、Mother Board、Wireless Hub、Telecom Device、Automotive electronics、Computer、Peripherals and High frequency magnetic inductor
- / Between any heat-generating component and a heat sink.
- / 5G base station & infrastructure
- / EV electric vehicle

■ CONFIGURATIONS

- / Cartridges: 50ml, 400ml
- / Other special and custom sizes are available upon request

■ PRESERVATION

It can be preserved for 24 months under the condition of unopened and under room temperature 25°C.

■ PLEASE NOTE

- / It is recommended to preheat the material to 40°C for 20 minutes or 50°C for 10 minutes if ambient temperature is less than 25°C for better extrusion and mixing.
- / It's recommended that the diameter of mixing tube outlet should be 3mm at least, which can solve the possible problem of poor fluidity caused by ambient temperature.

■ TYPICAL PROPERTIES

PROPERTY	EPDM30	TEST METHOD	UNIT
Color	Black Gray (A part) Black (B part)	Visual	-
Resin base	Epoxy	-	-
A:B	100:100	-	-
Viscosity A	270	ISO 3219	Pa.s
Viscosity B	240	ISO 3219	Pa.s
Thixotropic Index	4.3	ISO 3219	-
Density	2.8	ASTM D792	g/cm ³
Application temperature	-40~120	-	°C
Surface dry	25°C/50 min	By LiPOLY	-
Curing condition	25°C/4 hrs	By LiPOLY	-
Hardness	90	ASTM D2240	Shore A
Elongation at break	<1	ISO527	%
Tensile strength	60	ISO527	N/cm ²
Lap shear to aluminum	300	ASTM D1002	N/cm ²
Shelf life	24 months	-	-
ROHS & REACH	Compliant	-	-
ELECTRICAL			
Dielectric breakdown	14	ASTM D149	KV/mm
Volume resistivity	>10 ¹¹	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	3.0	ISO 22007-2	W/m*K



Non-Silicone Two-Part Thermal Conductive Sealing Glue

LiPOLY EP770 is a silicone-free two-part sealing gap filler and caulking agent without low molecular siloxane volatilization. EP770 provides low viscosity and high fluidity. The high deformation material, which can be filling the gap closely, cover the tolerance, and has outstanding conductivity, makes is suitable for filling the peculiar gap.

■ FEATURES

- / Thermal conductivity: 2.5 W/m*K
- / Thermally conductive vibration dampening
- / Low mixing viscosity
- / Extremely low Shrinkage rate 0.01%.
- / Epoxy Based material with high hardness for support
- / Slow sedimentation rate due to Resin & powder mixing perfectly via superb processing technology. It leads EP770 material easy to mix and disperse

■ TYPICAL APPLICATION

- /Motor: Torque motor 、 Linear Motor
Servo motor
- /IGBT module
- /Electronic components: IC 、 CPU
MOS 、 Mother Board
- /Wireless Hub
- /Automotive electronics
- /Between any heat-generating component and a heat sink
- /5G base station & infrastructure
- / EV electric vehicle

■ CONFIGURATIONS

- / Tinplate Can:1 kg
- / Other special and custom sizes are available upon request

■ PRESERVATION

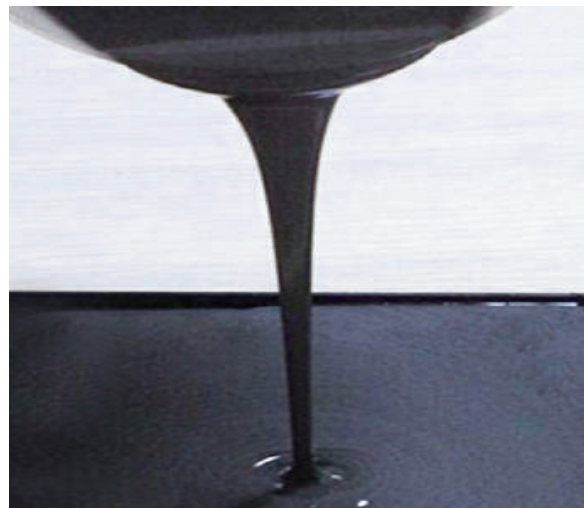
It can be preserved for 24 months under the condition of unopened and under room temperature 25°C.

■ PLEASE NOTE

It is recommended to preheat the material to 40°C for 20 minutes or 50°C for 10 minutes if ambient temperature is less than 25°C for better extrusion and mixing.

■ TYPICAL PROPERTIES

PROPERTY	EP770	TEST METHOD	UNIT
Color	Black	Visual	-
Resin base	Epoxy	-	-
A:B	100:10	-	-
Viscosity A	350	ISO 3219	Pa.s
Viscosity mixed	5	ISO 3219	Pa.s
Shrinkage rate	0.01	ASTM D2566	%
Density	1.8	ASTM D792	g/cm ³
Application temperature	-60~150	-	°C
Curing condition 1	80°C/1.5 hrs	By LiPOLY	-
Curing condition 2	25°C/35 hrs	By LiPOLY	-
Hardness	80	ASTM D2240	Shore A
Tensile strength	73	ISO527	N/cm ²
Lap shear to aluminum	412	ASTM D1002	N/cm ²
Shelf life	24 months	-	-
ROHS & REACH	Compliant	-	-
ELECTRICAL			
Dielectric breakdown	14	ASTM D149	KV/mm
Volume resistivity	>10 ¹¹	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	2.5	ASTM D5470	W/m*K



G3380NA/NB/NC

Non-Silicone Thermal Grease Series

LiPOLY G3380N is made of non-silicon resin material, no low-molecular siloxane volatilization, and will not pollute the optical surface. Low thermal resistance and great thermal conductivity. G3380N has been used extensively in Consumer electronics and Microprocessors for their thermal control techniques. The grease can cover several coats on the component interface. When the component's temperature rises, the grease stickiness will decrease, which can moisten the interface components.

■ FEATURES

- / Thermal conductivity: 1.3 / 3.2 / 4.5 W/m*K
- / No outgassing
- / Low thermal impedance

■ TYPICAL APPLICATION

- / CPU and chip coolers
- / Switching power supplies
- / LED appliance
- / Between any heat-generating component and heat sink
- / 5G base station & infrastructure
- / EV electric vehicle

■ CONFIGURATIONS

- / Cartridges: 50ml
- / Tinplate Can:1kg
- / Other special and custom sizes are available upon request

■ PRESERVATION

It can be preserved for 60 months under the condition of unopened and under room temperature 25°C.

■ TYPICAL PROPERTIES

PROPERTY	G3380NA	G3380NB	G3380NC	TEST METHOD	UNIT
Color	White	Gray	Gray	Visual	-
Resin base	Non-Silicone	Non-Silicone	Non-Silicone	-	-
Filler	Non-Metal	Metal	Metal	-	-
Viscosity	96	43	93	ISO 3219	Pa.s
Density	2.2	1.9	2.1	ASTM D792	g/cm ³
Application temperature	-60~150	-60~150	-60~150	-	°C
Bond line thickness	55	33	30	-	μm
Shelf life	60 months	60 months	60 months	-	-
ROHS & REACH	Compliant	Compliant	Compliant	-	-
ELECTRICAL					
Dielectric breakdown	14	N/A	N/A	ASTM D149	KV/mm
Volume resistivity	>10 ¹¹	N/A	N/A	ASTM D257	Ohm-m
THERMAL					
Thermal conductivity	1.3	3.2	4.5	ASTM D5470	W/m*K
Thermal impedance@50psi	0.05	0.03	0.02	ASTM D5470	°C-in ² / W
Thermal impedance@50psi	32.2	22.5	12.9	ASTM D5470	°C-mm ² / W



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TEM96A

Thermal Conductive RF Absorber Pad

LiPOLY TEM96A is a thermally conductive absorber based upon soft magnetic materials dispersed in a polymeric resin. It has a thermal conductivity of 2.0 W/m*K and dissipates electromagnetic radiation rapidly to mitigate against EMI issues.

FEATURES

- / Thermal conductivity: 2.0 W/m*K
- / Excellent absorption characteristics
- / Naturally tacky
- / Reworkable

TYPICAL APPLICATION

- / IC, CPU, MOS, LED, M/B, Heat sink
- / LCD-TV, Notebook PC, PC, Telecom device, Wireless hub
- / DDR II module, DVD applications, Hand-set applications
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

- / Sheet form
- / Die-cut parts

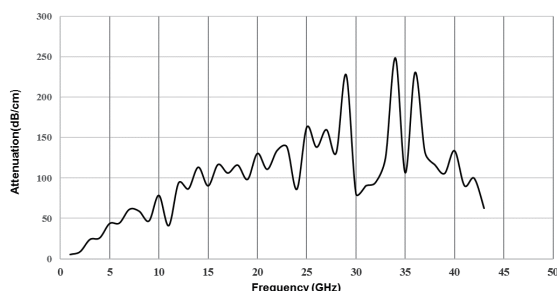
FREQUENCY APPLICATION

- 2.4 GHz Wi-Fi Router , Bluetooth
- 3.5 GHz 5G Mobile Networks
- 5.0 GHz Wi-Fi Router
- 12~18 GHz Low Earth Orbit (LEO) System
- 28 GHz 5G Mobile Networks
- 39 GHz 5G Mobile Networks

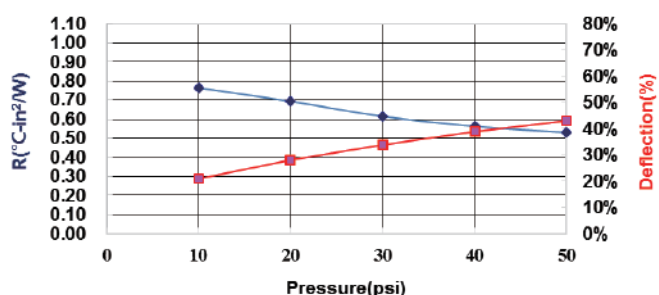
TYPICAL PROPERTIES

PROPERTY	TEM96A	TEST METHOD	UNIT
Color	Dark Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	4.4	ASTM D792	g/cm ³
Hardness	40	ASTM D2240	Shore OO
TML	0.14	By LiPOLY	%
Water absorption	0.04	ASTM D570	%
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	21	ASTM D5470 modify	%
Deflection @20 psi	28	ASTM D5470 modify	%
Deflection @30 psi	34	ASTM D5470 modify	%
Deflection @40 psi	39	ASTM D5470 modify	%
Deflection @50 psi	43	ASTM D5470 modify	%
EMI Attenuation @1.0mm			
EMI attenuation@ 2.4 GHz	16.6	ASTM D4935 modify	dB/cm
EMI attenuation@ 3.5 GHz	24.0	ASTM D4935 modify	dB/cm
EMI attenuation@ 5.0 GHz	43.5	ASTM D4935 modify	dB/cm
EMI attenuation@ 12 GHz	93.8	ASTM D4935 modify	dB/cm
EMI attenuation@ 18 GHz	116	ASTM D4935 modify	dB/cm
EMI attenuation@ 28 GHz	131	ASTM D4935 modify	dB/cm
EMI attenuation@ 39 GHz	106	ASTM D4935 modify	dB/cm
ELECTRICAL			
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	2.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.762	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.692	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.614	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.562	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.530	ASTM D5470	°C-in ² / W

Attenuation



Thermal Resistance vs. Pressure vs. Deflection



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TEM96B

Thermal Conductive RF Absorber Pad

LiPOLY TEM96B is a thermally conductive absorber based upon soft magnetic materials dispersed in a polymeric resin. It has a thermal conductivity of 3.0 W/m*K and dissipates electromagnetic radiation rapidly to mitigate against EMI issues.

■ FEATURES

- / Thermal conductivity: 3.0 W/m*K
- / Excellent absorption characteristics
- / Naturally tacky
- / Reworkable

■ TYPICAL APPLICATION

- / IC, CPU, MOS, LED, M/B, Heat sink
- / LCD-TV, Notebook PC, PC, Telecom device, Wireless hub
- / DDR II module, DVD applications, Hand-set applications
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

- / Sheet form
- / Die-cut parts

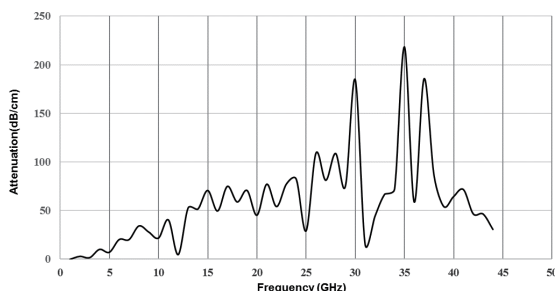
■ FREQUENCY APPLICATION

- 2.4 GHz Wi-Fi Router , Bluetooth
- 3.5 GHz 5G Mobile Networks
- 5.0 GHz Wi-Fi Router
- 12~18 GHz Low Earth Orbit (LEO) System
- 28 GHz 5G Mobile Networks
- 39 GHz 5G Mobile Networks

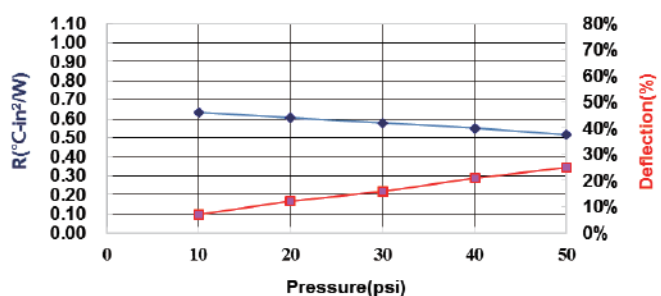
■ TYPICAL PROPERTIES

PROPERTY	TEM96B	TEST METHOD	UNIT
Color	Dark Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.9	ASTM D792	g/cm ³
Hardness	45	ASTM D2240	Shore OO
TML	0.07	By LiPOLY	%
Water absorption	0.04	ASTM D570	%
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	7	ASTM D5470 modify	%
Deflection @20 psi	12	ASTM D5470 modify	%
Deflection @30 psi	16	ASTM D5470 modify	%
Deflection @40 psi	21	ASTM D5470 modify	%
Deflection @50 psi	25	ASTM D5470 modify	%
EMI Attenuation @1.0mm			
EMI attenuation@ 2.4 GHz	7.0	ASTM D4935 modify	dB/cm
EMI attenuation@ 3.5 GHz	8.6	ASTM D4935 modify	dB/cm
EMI attenuation@ 5.0 GHz	20.3	ASTM D4935 modify	dB/cm
EMI attenuation@ 12 GHz	52.5	ASTM D4935 modify	dB/cm
EMI attenuation@ 18 GHz	70.8	ASTM D4935 modify	dB/cm
EMI attenuation@ 28 GHz	75.0	ASTM D4935 modify	dB/cm
EMI attenuation@ 39 GHz	64.4	ASTM D4935 modify	dB/cm
ELECTRICAL			
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	3.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.634	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.606	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.579	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.551	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.516	ASTM D5470	°C-in ² / W

Attenuation



Thermal Resistance vs. Pressure vs. Deflection



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TEM96C

Thermal Conductive RF Absorber Pad

LiPOLY TEM96C is a thermally conductive absorber based upon soft magnetic materials dispersed in a polymeric resin. It has a thermal conductivity of 4.0 W/m*K and dissipates electromagnetic radiation rapidly to mitigate against EMI issues.

FEATURES

- / Thermal conductivity: 4.0 W/m*K
- / Excellent absorption characteristics
- / Naturally tacky
- / Reworkable

TYPICAL APPLICATION

- / IC, CPU, MOS, LED, M/B, Heat sink
- / LCD-TV, Notebook PC, PC, Telecom device, Wireless hub
- / DDR II module, DVD applications, Hand-set applications
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

- / Sheet form
- / Die-cut parts

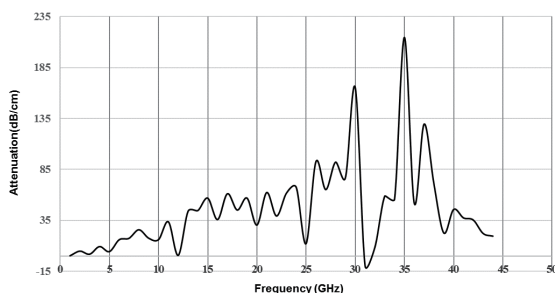
FREQUENCY APPLICATION

- 2.4 GHz Wi-Fi Router , Bluetooth
- 3.5 GHz 5G Mobile Networks
- 5.0 GHz Wi-Fi Router
- 12~18 GHz Low Earth Orbit (LEO) System
- 28 GHz 5G Mobile Networks
- 39 GHz 5G Mobile Networks

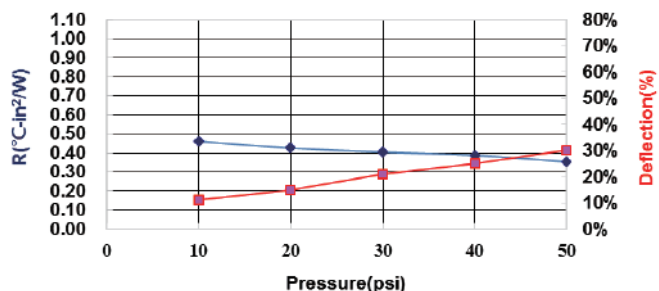
TYPICAL PROPERTIES

PROPERTY	TEM96C	TEST METHOD	UNIT
Color	Dark Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.6	ASTM D792	g/cm ³
Hardness	55	ASTM D2240	Shore OO
TML	0.04	By LiPOLY	%
Water absorption	0.04	ASTM D570	%
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	11	ASTM D5470 modify	%
Deflection @20 psi	15	ASTM D5470 modify	%
Deflection @30 psi	21	ASTM D5470 modify	%
Deflection @40 psi	25	ASTM D5470 modify	%
Deflection @50 psi	30	ASTM D5470 modify	%
EMI Attenuation @1.0mm			
EMI attenuation@ 2.4 GHz	7.0	ASTM D4935 modify	dB/cm
EMI attenuation@ 3.5 GHz	6.7	ASTM D4935 modify	dB/cm
EMI attenuation@ 5.0 GHz	15.8	ASTM D4935 modify	dB/cm
EMI attenuation@ 12 GHz	43.7	ASTM D4935 modify	dB/cm
EMI attenuation@ 18 GHz	56.8	ASTM D4935 modify	dB/cm
EMI attenuation@ 28 GHz	76.6	ASTM D4935 modify	dB/cm
EMI attenuation@ 39 GHz	45.5	ASTM D4935 modify	dB/cm
ELECTRICAL			
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	4.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.462	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.426	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.404	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.387	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.353	ASTM D5470	°C-in ² / W

Attenuation



Thermal Resistance vs. Pressure vs. Deflection



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N-TEM52

Non-Silicone Thermal Conductive RF Absorber Pad

LiPOLY N-TEM52 is a thermally conductive absorber based upon soft magnetic materials dispersed in a non-silicone resin. It has a thermal conductivity of 2.0 W/m*K and dissipates electromagnetic radiation rapidly to mitigate against EMI issues.

■ FEATURES

- / Thermal conductivity: 2.0 W/m*K
- / Excellent absorption characteristics
- / Naturally tacky
- / Reworkable

■ TYPICAL APPLICATION

- / IC, CPU, MOS, LED, M/B, Heat sink
- / LCD-TV, Notebook PC, PC, Telecom device, Wireless hub
- / DDR II module, DVD applications, Hand-set applications
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

- / Sheet form
- / Die-cut parts

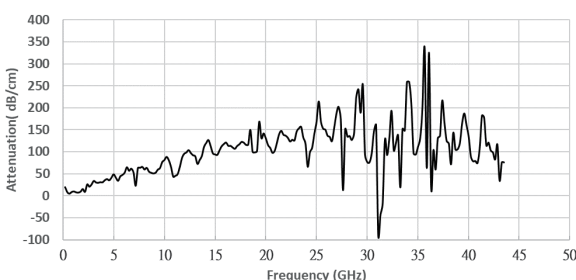
■ FREQUENCY APPLICATION

- 2.4 GHz Wi-Fi Router , Bluetooth
- 3.5 GHz 5G Mobile Networks
- 5.0 GHz Wi-Fi Router
- 6.0 GHz Wi-Fi Router
- 12~18 GHz Low Earth Orbit (LEO) System
- 28 GHz 5G Mobile Networks
- 39 GHz 5G Mobile Networks

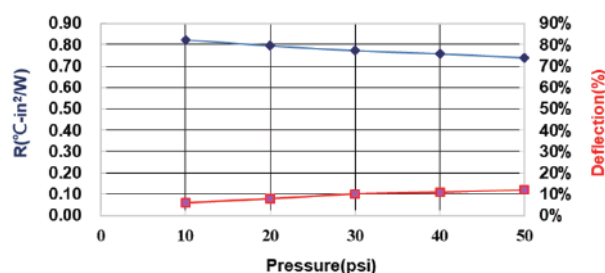
■ TYPICAL PROPERTIES

PROPERTY	N-TEM52	TEST METHOD	UNIT
Color	Dark Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	4.4	ASTM D792	g/cm ³
Hardness	60	ASTM D2240	Shore OO
TML	<0.8	By LiPOLY	%
Application temperature	-60~130	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	6	ASTM D5470 modify	%
Deflection @20 psi	8	ASTM D5470 modify	%
Deflection @30 psi	10	ASTM D5470 modify	%
Deflection @40 psi	11	ASTM D5470 modify	%
Deflection @50 psi	12	ASTM D5470 modify	%
EMI Attenuation @1.0mm			
EMI attenuation@ 2.4 GHz	26	ASTM D4935 modify	dB/cm
EMI attenuation@ 3.5 GHz	30	ASTM D4935 modify	dB/cm
EMI attenuation@ 5.0 GHz	49	ASTM D4935 modify	dB/cm
EMI attenuation@ 6.0 GHz	50	ASTM D4935 modify	dB/cm
EMI attenuation@ 12 GHz	96	ASTM D4935 modify	dB/cm
EMI attenuation@ 18 GHz	116	ASTM D4935 modify	dB/cm
EMI attenuation@ 28 GHz	135	ASTM D4935 modify	dB/cm
EMI attenuation@ 39 GHz	113	ASTM D4935 modify	dB/cm
ELECTRICAL			
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal Conductivity	2.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.823	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.794	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.771	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.756	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.737	ASTM D5470	°C-in ² / W

Attenuation



Thermal Resistance vs. Pressure vs. Deflection



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N-TEM53

Non-Silicone Thermal Conductive RF Absorber Pad

LiPOLY N-TEM53 is a thermally conductive absorber based upon soft magnetic materials dispersed in a non-silicone resin. It has a thermal conductivity of 3.0 W/m*K and dissipates electromagnetic radiation rapidly to mitigate against EMI issues.

■ FEATURES

- / Thermal conductivity: 3.0 W/m*K
- / Excellent absorption characteristics
- / Naturally tacky
- / Reworkable

■ TYPICAL APPLICATION

- / IC, CPU, MOS, LED, M/B, Heat sink
- / LCD-TV, Notebook PC, PC, Telecom device, Wireless hub
- / DDR II module, DVD applications, Hand-set applications
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

- / Sheet form
- / Die-cut parts

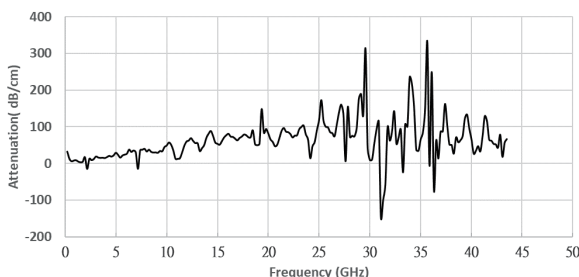
■ FREQUENCY APPLICATION

- 2.4 GHz Wi-Fi Router , Bluetooth
- 3.5 GHz 5G Mobile Networks
- 5.0 GHz Wi-Fi Router
- 6.0 GHz Wi-Fi Router
- 12~18 GHz Low Earth Orbit (LEO) System
- 28 GHz 5G Mobile Networks
- 39 GHz 5G Mobile Networks

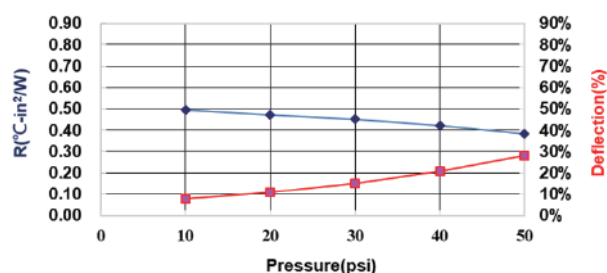
■ TYPICAL PROPERTIES

PROPERTY	N-TEM53	TEST METHOD	UNIT
Color	Dark Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.9	ASTM D792	g/cm ³
Hardness	75	ASTM D2240	Shore OO
TML	<0.8	By LiPOLY	%
Application temperature	-60~130	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	8	ASTM D5470 modify	%
Deflection @20 psi	11	ASTM D5470 modify	%
Deflection @30 psi	15	ASTM D5470 modify	%
Deflection @40 psi	21	ASTM D5470 modify	%
Deflection @50 psi	28	ASTM D5470 modify	%
EMI Attenuation @1.0mm			
EMI attenuation@ 2.4 GHz	12	ASTM D4935 modify	dB/cm
EMI attenuation@ 3.5 GHz	14	ASTM D4935 modify	dB/cm
EMI attenuation@ 5.0 GHz	29	ASTM D4935 modify	dB/cm
EMI attenuation@ 6.0 GHz	25	ASTM D4935 modify	dB/cm
EMI attenuation@ 12 GHz	60	ASTM D4935 modify	dB/cm
EMI attenuation@ 18 GHz	71	ASTM D4935 modify	dB/cm
EMI attenuation@ 28 GHz	112	ASTM D4935 modify	dB/cm
EMI attenuation@ 39 GHz	68	ASTM D4935 modify	dB/cm
ELECTRICAL			
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal Conductivity	3.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.496	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.473	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.452	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.423	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.385	ASTM D5470	°C-in ² / W

Attenuation



Thermal Resistance vs. Pressure vs. Deflection



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N-TEM54

Non-Silicone Thermal Conductive RF Absorber Pad

LiPOLY N-TEM54 is a thermally conductive absorber based upon soft magnetic materials dispersed in a non-silicone resin. It has a thermal conductivity of 4.0 W/m*K and dissipates electromagnetic radiation rapidly to mitigate against EMI issues.

■ FEATURES

- / Thermal conductivity: 4.0 W/m*K
- / Excellent absorption characteristics
- / Naturally tacky
- / Reworkable

■ TYPICAL APPLICATION

- / IC, CPU, MOS, LED, M/B, Heat sink
- / LCD-TV, Notebook PC, PC, Telecom device, Wireless hub
- / DDR II module, DVD applications, Hand-set applications
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

- / Sheet form
- / Die-cut parts

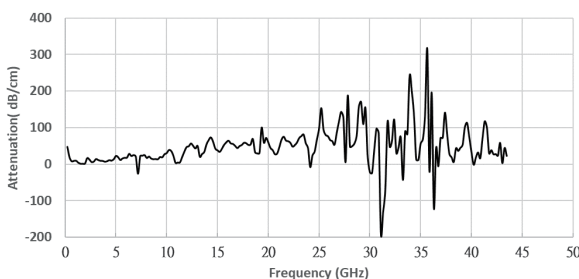
■ FREQUENCY APPLICATION

- 2.4 GHz Wi-Fi Router , Bluetooth
- 3.5 GHz 5G Mobile Networks
- 5.0 GHz Wi-Fi Router
- 6.0 GHz Wi-Fi Router
- 12~18 GHz Low Earth Orbit (LEO) System
- 28 GHz 5G Mobile Networks
- 39 GHz 5G Mobile Networks

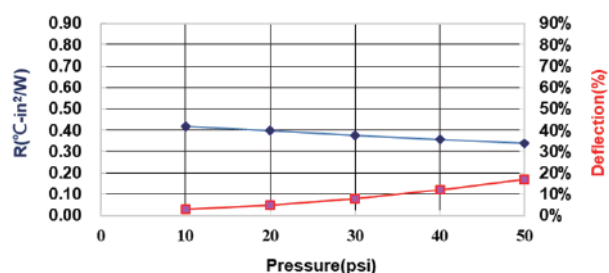
■ TYPICAL PROPERTIES

PROPERTY	N-TEM54	TEST METHOD	UNIT
Color	Dark Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.6	ASTM D792	g/cm ³
Hardness	75	ASTM D2240	Shore OO
TML	<0.8	By LiPOLY	%
Application temperature	-60~130	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	3	ASTM D5470 modify	%
Deflection @20 psi	5	ASTM D5470 modify	%
Deflection @30 psi	8	ASTM D5470 modify	%
Deflection @40 psi	12	ASTM D5470 modify	%
Deflection @50 psi	17	ASTM D5470 modify	%
EMI Attenuation @1.0mm			
EMI attenuation@ 2.4 GHz	12	ASTM D4935 modify	dB/cm
EMI attenuation@ 3.5 GHz	9	ASTM D4935 modify	dB/cm
EMI attenuation@ 5.0 GHz	22	ASTM D4935 modify	dB/cm
EMI attenuation@ 6.0 GHz	18	ASTM D4935 modify	dB/cm
EMI attenuation@ 12 GHz	47	ASTM D4935 modify	dB/cm
EMI attenuation@ 18 GHz	53	ASTM D4935 modify	dB/cm
EMI attenuation@ 28 GHz	118	ASTM D4935 modify	dB/cm
EMI attenuation@ 39 GHz	49	ASTM D4935 modify	dB/cm
ELECTRICAL			
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal Conductivity	4.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.419	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.399	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.377	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.357	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.338	ASTM D5470	°C-in ² / W

Attenuation



Thermal Resistance vs. Pressure vs. Deflection



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DTT44-s

5G mmWave Thermal Conductive Gel Pad

LiPOLY DTT44-s is a soft thermal-conductive gel pad specifically designed for networking communication applications. DTT44-s is designed to focus on D_k and D_f to reduce interference in RF modules. DTT44-s has a thermal conductivity of 3.0 W/m*K. This product can be supplied as standard sheets, custom die-cuts or custom molded parts making it suitable for a wide range of applications.

FEATURES

- / Thermal conductivity: 3.0 W/m*K
- / Hardness: Shore OO/50
- / Low dielectric constant
- / For high frequency applications
- / Available in a range of thicknesses

TYPICAL APPLICATION

- / Communications satellite
- / Satellite positioning devices
- / IoT devices
- / Telecommunication hardware
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

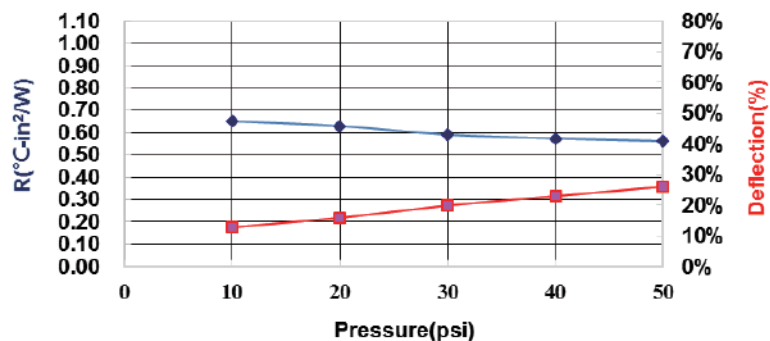
- / Sheet form
- / Die-cut parts



TYPICAL PROPERTIES

PROPERTY	DTT44-s	TEST METHOD	UNIT
Color	Blue	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	2.2	ASTM D792	g/cm ³
Hardness	50	ASTM D2240	Shore OO
Water absorption	0.02	ASTM D570	%
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	13	ASTM D5470 modify	%
Deflection @20 psi	16	ASTM D5470 modify	%
Deflection @30 psi	20	ASTM D5470 modify	%
Deflection @40 psi	23	ASTM D5470 modify	%
Deflection @50 psi	26	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	11	ASTM D149	KV/mm
Surface resistivity	>10 ¹⁰	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
Dielectric constant@2GHz D_k	4.115	ASTM D150	-
Dielectric constant@6GHz D_k	4.214	ASTM D150	-
Dielectric constant@10GHz D_k	3.983	ASTM D150	-
Dielectric loss@2GHz D_f	0.00486	ASTM D150	-
Dielectric loss@6GHz D_f	0.00704	ASTM D150	-
Dielectric loss@10GHz D_f	0.00940	ASTM D150	-
THERMAL			
Thermal conductivity	3.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.652	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.630	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.591	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.574	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.562	ASTM D5470	°C-in ² / W

Thermal Resistance vs. Pressure vs. Deflection



DTT65-s

5G mmWave Thermal Conductive Gel Pad

LiPOLY DTT65-s is a soft thermal-conductive gel pad specifically designed for networking communication applications. DTT65-s is designed to focus on D_k and D_f to reduce interference in RF modules. DTT65-s has a thermal conductivity of 5.0 W/m*K. This product can be supplied as standard sheets, custom die-cuts or custom molded parts making it suitable for a wide range of applications.

FEATURES

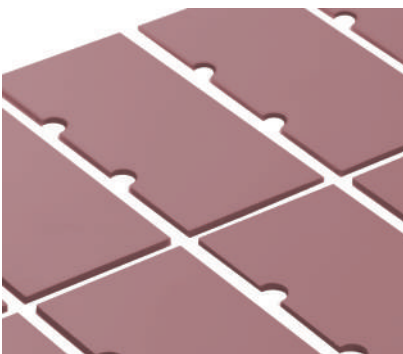
- / Thermal conductivity: 5.0 W/m*K
- / Hardness: Shore OO/55
- / Low dielectric constant
- / For high frequency applications
- / Available in a range of thicknesses

TYPICAL APPLICATION

- / Communications satellite
- / Satellite positioning devices
- / IoT devices
- / Telecommunication hardware
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

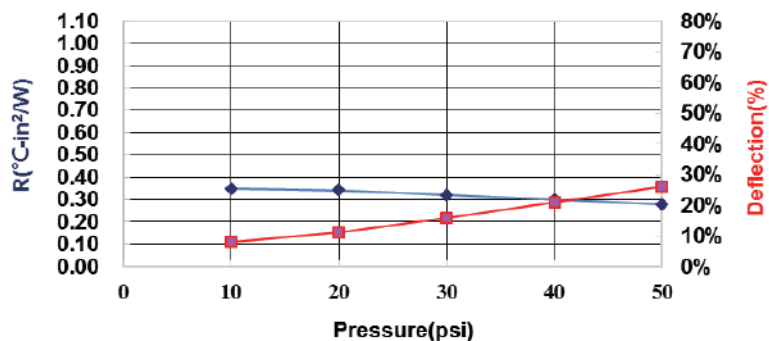
- / Sheet form
- / Die-cut parts



TYPICAL PROPERTIES

PROPERTY	DTT65-s	TEST METHOD	UNIT
Color	Red	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	2.1	ASTM D792	g/cm ³
Hardness	55	ASTM D2240	Shore OO
Water absorption	0.005	ASTM D570	%
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	8	ASTM D5470 modify	%
Deflection @20 psi	11	ASTM D5470 modify	%
Deflection @30 psi	16	ASTM D5470 modify	%
Deflection @40 psi	21	ASTM D5470 modify	%
Deflection @50 psi	26	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	10	ASTM D149	KV/mm
Surface resistivity	>10 ¹²	ASTM D257	Ohm
Volume resistivity	>10 ¹³	ASTM D257	Ohm-m
Dielectric constant@2GHz D_k	4.131	ASTM D150	-
Dielectric constant@6GHz D_k	4.058	ASTM D150	-
Dielectric constant@10GHz D_k	4.013	ASTM D150	-
Dielectric loss@2GHz D_f	0.00509	ASTM D150	-
Dielectric loss@6GHz D_f	0.00658	ASTM D150	-
Dielectric loss@10GHz D_f	0.00780	ASTM D150	-
THERMAL			
Thermal conductivity	5.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.350	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.342	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.323	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.302	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.281	ASTM D5470	°C-in ² / W

Thermal Resistance vs. Pressure vs. Deflection



ST6000-S

UL Flammability Thermal Conductive Tape

LiPOLY ST6000-S is a thermally conductive tape with UL high temperature heat resistance. The thermal conductivity is 1.8 W/m*K. The stickiness and strength of the thermal tape will increase when temperatures and pressure rise. They are designed to securely bond heat sinks to power dissipating components without an additional clamping mechanism.)

■ FEATURES

/ Thermal conductivity:1.8 W/m*K
/ High temperature stability
/ Easy to assemble

■ TYPICAL APPLICATION

/ Power supplies
/ Motor controls
/ Power semiconductors
/ 5G base station & infrastructure
/ EV electric vehicle

■ SPECIFICATIONS

/ Sheet form
/ Die-cut parts

■ TYPICAL PROPERTIES

PROPERTY	ST6000-S	TEST METHOD	UNIT
Color	White	Visual	-
Reinforced layer	None	-	-
Thickness	0.2	ASTM D374	mm
Density	2.3	ASTM D792	g/cm ³
Application temperature	-60~180	-	°C
Short time temp. @30sec	288	-	°C
ROHS	Compliant	-	-
ADHESION			
Lap shear strength	35	ASTM D1002	N/cm ²
Die shear strength@25°C	50	-	N/cm ²
Die shear strength@80°C	50	-	N/cm ²
Holding power 1kg @25°C	>10000	PSTC-7	min
Holding power 1kg @80°C	>10000	PSTC-7	min
90° Peeling strength @ 25°C, 72 hrs	>8	ASTM D3330	N/inch
90° Peeling strength @ Thermal aging	>7	80°C 1000 hrs	N/inch
90° Peeling strength @ HAST	>10	85°C/85%RH 1000 hrs	N/inch
90° Peeling strength @ Thermal cycling	>9.5	-40°C~120°C 500 cycles	N/inch
ELECTRICAL			
Dielectric breakdown	3.5	ASTM D149	KV
Surface resistivity	>10 ⁹	ASTM D257	Ohm
Volume resistivity	>10 ⁹	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	1.8	ASTM D5470	W/m*K
Thermal impedance@5psi	0.81	ASTM D5470	°C-in ² / W
Thermal impedance@10psi	0.72	ASTM D5470	°C-in ² / W
Thermal impedance@15psi	0.65	ASTM D5470	°C-in ² / W

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UL Flammability Thermal Conductive Tape

LiPOLY AT910 is a fiberglass reinforced thermally conductive tape with UL high temperature heat resistance. The thermal conductivity is 1.0 W/m*K. The stickiness and strength of the thermal tape will increase when temperatures and pressure rise. They are designed to securely bond heat sinks to power dissipating components without an additional clamping mechanism.

■ FEATURES

- / Thermal conductivity:1.0 W/m*K
- / Excellent adhesive properties
- / Designed for manufacture
- / Excellent long term reliability
- / Fiberglass reinforced layer

■ TYPICAL APPLICATION

- / Automotive electronics
- / Telecommunications
- / LED light bar & LED lamp
- / Between any heat-generating component and heat sink
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

- / Sheet form
- / Die-cut parts

■ TYPICAL PROPERTIES

PROPERTY	AT910		TEST METHOD	UNIT
Color	White		Visual	-
Reinforced layer	Fiberglass		-	-
Thickness	0.15	0.25	ASTM D374	mm
Density	1.8	1.8	ASTM D792	g/cm ³
Application temperature	-60~120	-60~120	-	°C
Short time temp. @30sec	200	200	-	°C
ROHS	Compliant	Compliant	-	-
ADHESION				
Initial tack	11	8	PSTC-6	cm
Lap shear strength	50	50	ASTM D1002	N/cm ²
Die shear strength@25°C	100	100	-	N/cm ²
Die shear strength@80°C	70	70	-	N/cm ²
Holding power 1kg @25°C	>10000	>10000	PSTC-7	min
Holding power 1kg @80°C	>10000	>10000	PSTC-7	min
90° Peeling strength @ 25°C, 72 hrs	>5	>6	ASTM D3330	N/inch
90° Peeling strength @ Thermal aging	>14	>20	80°C 1000 hrs	N/inch
90° Peeling strength @ HAST	>20	>24	85°C/85%RH 1000 hrs	N/inch
90° Peeling strength @ Thermal cycling	>27	>28	-40°C~120°C 500 cycles	N/inch
ELECTRICAL				
Dielectric breakdown	2	3	ASTM D149	KV
Surface resistivity	>10 ¹¹	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹¹	>10 ¹¹	ASTM D257	Ohm-m
THERMAL				
Thermal conductivity	1.0	1.0	ASTM D5470	W/m*K
Thermal impedance@5psi	0.81	1.38	ASTM D5470	°C-in ² / W
Thermal impedance@10psi	0.78	1.30	ASTM D5470	°C-in ² / W
Thermal impedance@15psi	0.76	1.25	ASTM D5470	°C-in ² / W

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Insulated Thermal Conductive Tape

LiPOLY AT900A is a thermally conductive tape. With a fiberglass reinforced layer and a thermal conductivity of 0.9 W/m*K this product is designed for applications where additional durability is needed. AT900A can be provided in either standard sheets or custom-die cuts.

■ FEATURES

- / Thermal conductivity:0.9 W/m*K
- / Excellent adhesive properties
- / Designed for manufacture
- / Excellent long term reliability
- / Fiberglass reinforced layer

■ TYPICAL APPLICATION

- / Automotive electronics
- / Telecommunications
- / LED light bar & LED lamp
- / Between any heat-generating component and heat sink
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

- / Sheet form
- / Die-cut parts

■ TYPICAL PROPERTIES

PROPERTY	AT900A		TEST METHOD	UNIT
Color	White		Visual	-
Reinforced layer	Fiberglass		-	-
Thickness	0.15	0.25	ASTM D374	mm
Density	1.6	1.6	ASTM D792	g/cm ³
Application temperature	-60~120	-60~120	-	°C
Short time temp. @30sec	200	200	-	°C
ROHS	Compliant	Compliant	-	-
ADHESION				
Initial tack	10	8	PSTC-6	cm
Lap shear strength	60	60	ASTM D1002	N/cm ²
Die shear strength@25°C	107	94	-	N/cm ²
Die shear strength@80°C	70	70	-	N/cm ²
Holding power 1kg @25°C	>10000	>10000	PSTC-7	min
Holding power 1kg @80°C	>10000	>10000	PSTC-7	min
90° Peeling strength @ 25°C, 72 hrs	>10	>12	ASTM D3330	N/inch
90° Peeling strength @ Thermal aging	>14	>20	80°C 1000 hrs	N/inch
90° Peeling strength @ HAST	>20	>25	85°C/85%RH 1000 hrs	N/inch
90° Peeling strength @ Thermal cycling	>15	>20	-40°C~120°C 500 cycles	N/inch
ELECTRICAL				
Dielectric breakdown	2	3	ASTM D149	KV
Surface resistivity	>10 ¹⁰	>10 ¹⁰	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL				
Thermal conductivity	0.9	0.9	ASTM D5470	W/m*K
Thermal impedance@5psi	0.87	1.15	ASTM D5470	°C-in ² / W
Thermal impedance@10psi	0.85	1.14	ASTM D5470	°C-in ² / W
Thermal impedance@15psi	0.82	1.12	ASTM D5470	°C-in ² / W

Insulated Thermal Conductive Tape

LiPOLY AT900C is a thermally conductive tape. With a fiberglass reinforced layer and a thermal conductivity of 1.2 W/m*K this product is designed for applications where additional durability is needed. AT900C can be provided in either standard sheets or custom-die cuts.

■ FEATURES

- / Thermal conductivity:1.2 W/m*K
- / Excellent adhesive properties
- / Designed for manufacture
- / Excellent long term reliability
- / Fiberglass reinforced layer

■ TYPICAL APPLICATION

- / Automotive electronics
- / Telecommunications
- / LED light bar & LED lamp
- / Between any heat-generating component and heat sink
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

- / Sheet form
- / Die-cut parts

■ TYPICAL PROPERTIES

PROPERTY	AT900C		TEST METHOD	UNIT
Color	White		Visual	-
Reinforced layer	Fiberglass		-	-
Thickness	0.15	0.25	ASTM D374	mm
Density	1.7	1.7	ASTM D792	g/cm ³
Application temperature	-60~120	-60~120	-	°C
Short time temp. @30sec	200	200	-	°C
ROHS	Compliant	Compliant	-	-
ADHESION				
Initial tack	14	12	PSTC-6	cm
Lap shear strength	55	60	ASTM D1002	N/cm ²
Die shear strength@25°C	100	100	-	N/cm ²
Die shear strength@80°C	65	65	-	N/cm ²
Holding power 1kg @25°C	>10000	>10000	PSTC-7	min
Holding power 1kg @80°C	>10000	>10000	PSTC-7	min
90° Peeling strength @ 25°C, 72 hrs	>6	>8	ASTM D3330	N/inch
90° Peeling strength @ Thermal aging	>10	>15	80°C 1000 hrs	N/inch
90° Peeling strength @ HAST	>18	>22	85°C/85%RH 1000 hrs	N/inch
90° Peeling strength @ Thermal cycling	>13	>19	-40°C~120°C 500 cycles	N/inch
ELECTRICAL				
Dielectric breakdown	3	4	ASTM D149	KV
Surface resistivity	>10 ¹¹	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹¹	>10 ¹¹	ASTM D257	Ohm-m
THERMAL				
Thermal conductivity	1.2	1.2	ASTM D5470	W/m*K
Thermal impedance@5psi	0.72	0.98	ASTM D5470	°C-in ² / W
Thermal impedance@10psi	0.68	0.94	ASTM D5470	°C-in ² / W
Thermal impedance@15psi	0.66	0.92	ASTM D5470	°C-in ² / W

High Thermal Conductive Tape

LiPOLY AT920-s is an unsupported thermally conductive tape with a thermal conductivity of 3.5 W/m*K. The thickness comes in 0.25 and 0.50 mm, and the AT920-s can withstand 4~7K voltage. Using highly thermal conductive particles makes the tape extremely reliable and easy to use. The stickiness and strength will increase when temperature and pressure rise.

■ FEATURES

- / Thermal conductivity:3.5 W/m*K
- / Excellent adhesive properties
- / Designed for manufacture
- / Excellent long term reliability

■ TYPICAL APPLICATION

- / Automotive electronics
- / Telecommunications
- / LED light bar & LED lamp
- / Between any heat-generating component and heat sink
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

- / Sheet form
- / Die-cut parts

■ TYPICAL PROPERTIES

PROPERTY	AT920-s		TEST METHOD	UNIT
Color	White		Visual	-
Reinforced layer	None		-	-
Thickness	0.25	0.50	ASTM D374	mm
Density	2.6	2.6	ASTM D792	g/cm ³
Application temperature	-60~120	-60~120	-	°C
Short time temp. @30sec	200	200	-	°C
ROHS	Compliant	Compliant	-	-
ADHESION				
Initial tack	12	8	PSTC-6	cm
Lap shear strength	30	35	ASTM D1002	N/cm ²
Die shear strength@25°C	80	85	-	N/cm ²
Die shear strength@80°C	40	40	-	N/cm ²
Holding power 1kg @25°C	>10000	>10000	PSTC-7	min
Holding power 1kg @80°C	>10000	>10000	PSTC-7	min
90° Peeling strength @ 25°C, 72 hrs	>7	>9	ASTM D3330	N/inch
90° Peeling strength @ Thermal aging	>12	>13	80°C 1000 hrs	N/inch
90° Peeling strength @ HAST	>20	>22	85°C/85%RH 1000 hrs	N/inch
90° Peeling strength @ Thermal cycling	>11	>13	-40°C~120°C 500 cycles	N/inch
ELECTRICAL				
Dielectric breakdown	4	7	ASTM D149	KV
Surface resistivity	>10 ¹¹	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹²	>10 ¹²	ASTM D257	Ohm-m
THERMAL				
Thermal conductivity	3.5	3.5	ASTM D5470	W/m*K
Thermal impedance@5psi	0.33	0.54	ASTM D5470	°C-in ² / W
Thermal impedance@10psi	0.32	0.53	ASTM D5470	°C-in ² / W
Thermal impedance@15psi	0.31	0.50	ASTM D5470	°C-in ² / W

High Insulated Thermal Conductive Film

LiPOLY PR27 is a very thin, high insulator with a thickness of 0.15mm. It uses Polyimide Film as the reinforcement material, which can increase the tensile strength. It's suitable for high power transistors, electrical equipment, and will be the best choice for auto-distribution systems.

■ FEATURES

- / Thermal conductivity:1.8 W/m*K
- / Good insulator
- / Low thermal impedance
- / Reworkable
- / High performance

■ TYPICAL APPLICATION

- / Power supplies
- / Motor controls
- / Power semiconductors
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

- / Sheet form
- / Die-cut parts
- / Single-sided adhesive or double-sided adhesive can be used as required



■ TYPICAL PROPERTIES

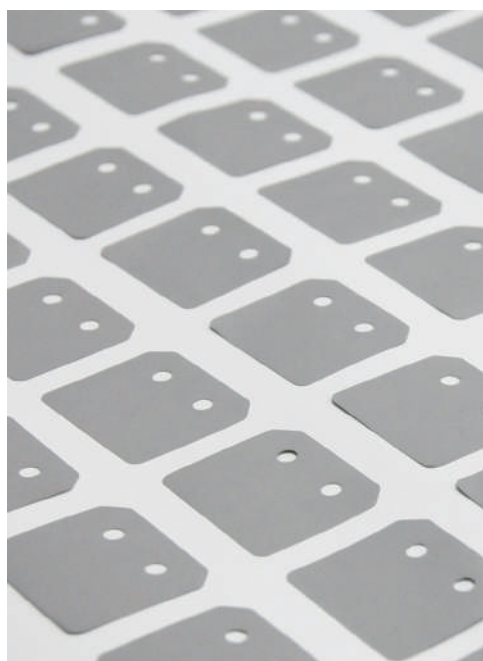
PROPERTY	PR27	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	0	-	-
Reinforced layer	Polyimide	-	-
Thickness	0.10 / 0.125 / 0.15	ASTM D374	mm
Density	1.5	ASTM D792	g/cm ³
Hardness	80	ASTM D2240	Shore A
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-

ELECTRICAL

Dielectric breakdown	12	ASTM D149	KV
Surface resistivity	>10 ¹³	ASTM D257	Ohm
Volume resistivity	>10 ¹²	ASTM D257	Ohm-m

THERMAL

Thermal conductivity	1.8	ASTM D5470	W/m*K
Thermal impedance@20psi	0.441	ASTM D5470	°C-in ² / W
Thermal impedance@60psi	0.360	ASTM D5470	°C-in ² / W
Thermal impedance@100psi	0.329	ASTM D5470	°C-in ² / W



High Insulated Thermal Conductive Film

LiPOLY PR28-s is a very thin, high insulator with a thickness of 0.15mm. It uses Polyimide Film as the reinforcement material, which can increase the tensile strength. It's suitable for high power transistors, electrical equipment, and will be the best choice for auto-distribution systems.

■ FEATURES

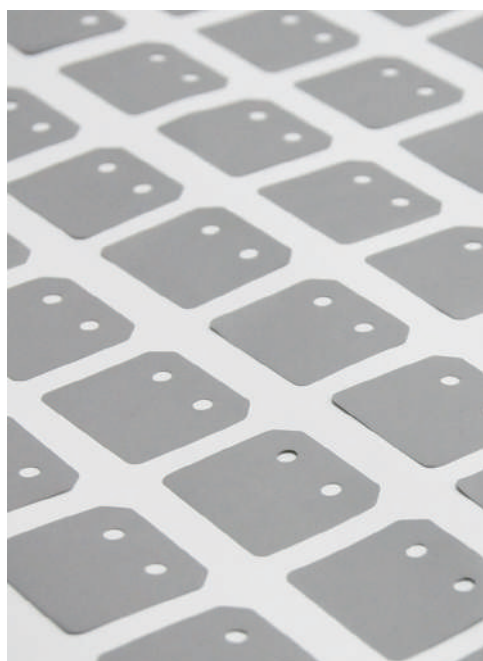
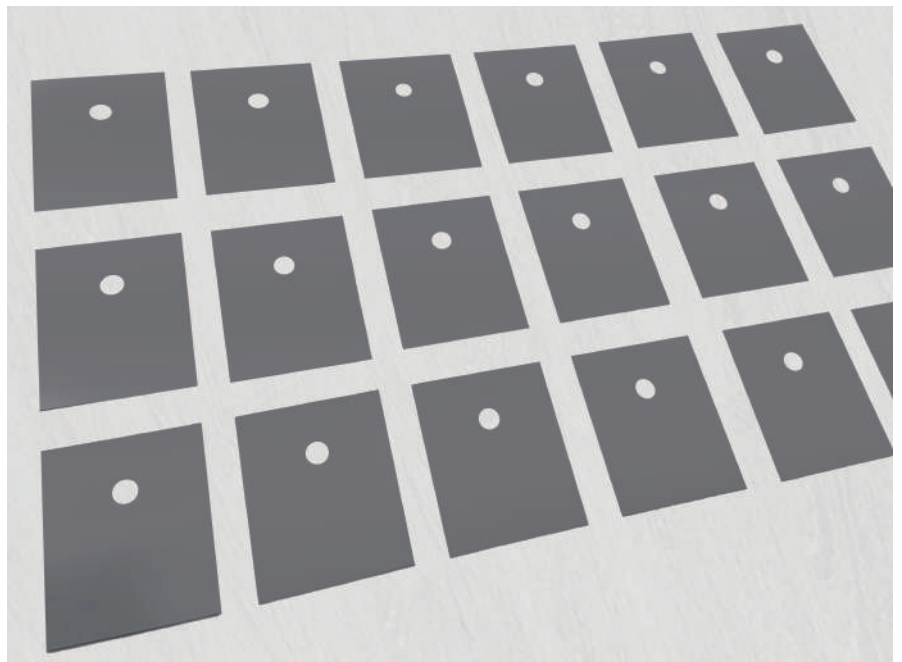
- / Thermal conductivity:2.5 W/m*K
- / Good insulator
- / Low thermal impedance
- / Reworkable
- / High performance

■ TYPICAL APPLICATION

- / Power supplies
- / Motor controls
- / Power semiconductors
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

- / Sheet form
- / Die-cut parts
- / Single-sided adhesive or double-sided adhesive can be used as required



■ TYPICAL PROPERTIES

PROPERTY	PR28-s	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	0	-	-
Reinforced layer	Polyimide	-	-
Thickness	0.10 / 0.125 / 0.15	ASTM D374	mm
Density	1.5	ASTM D792	g/cm ³
Hardness	80	ASTM D2240	Shore A
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV
Surface resistivity	>10 ¹³	ASTM D257	Ohm
Volume resistivity	>10 ¹²	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	2.5	ASTM D5470	W/m*K
Thermal impedance@20psi	0.342	ASTM D5470	°C-in ² / W
Thermal impedance@60psi	0.269	ASTM D5470	°C-in ² / W
Thermal impedance@100psi	0.235	ASTM D5470	°C-in ² / W

SH1500/2000/3000

High Insulated Thermal Conductive Pad Series

LiPOLY SH1500/2000/3000 is a thermal insulator uses fiberglass cloth as a reinforcement material, combined with thermal conductive silicon, giving it high thermal conduction and great compression strength. The thermal conductivity is 1.5/2.0/3.0 W/m*K, the thickness is 0.25~0.45mm. Its high insulation and fiberglass materials increase the strength of its structure making it cut resistant. SH1500/2000/3000 is the best choice for high torque screw setting. It functions well with electrical isolative of high power electronic component and the heat sink.

■ FEATURES

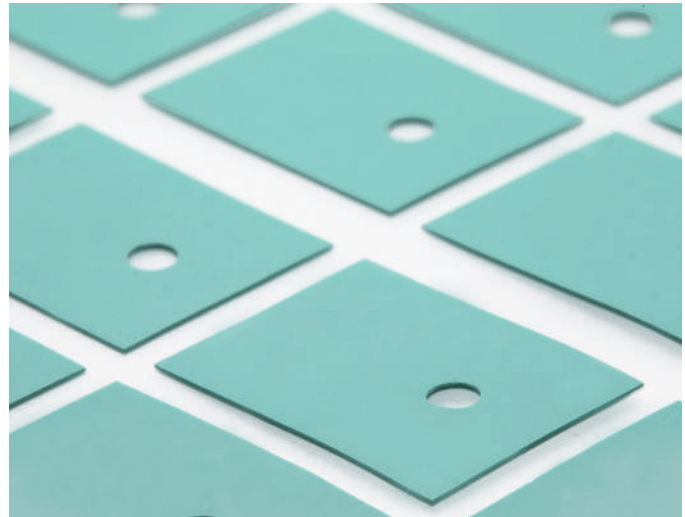
- / Thermal conductivity:1.5/2.0/3.0 W/m*K
- / Excellent insulator
- / Reworkable
- / Fiberglass reinforced

■ TYPICAL APPLICATION

- / Power supplies
- / Motor controls
- / EV electric vehicle
- / Automotive electronics
- / 5G base station & infrastructure

■ SPECIFICATIONS

- / Sheet form
- / Die-cut parts



■ TYPICAL PROPERTIES

PROPERTY	SH1500	SH2000	SH3000	TEST METHOD	UNIT
Color	Yellow	Green	Pink	Visual	-
Reinforced layer	Fiberglass	Fiberglass	Fiberglass	-	-
Thickness	0.23	0.30	0.35	ASTM D374	mm
Density	2.3	2.6	2.8	ASTM D792	g/cm ³
Hardness	80	80	80	ASTM D2240	Shore A
Application temperature	-60~180	-60~180	-60~180	-	°C
ROHS	Compliant	Compliant	Compliant	-	-
ELECTRICAL					
Dielectric breakdown	4	5	5.5	ASTM D149	KV
Surface resistivity	>10 ¹²	>10 ¹²	>10 ¹²	ASTM D257	Ohm
Volume resistivity	>10 ¹²	>10 ¹²	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL					
Thermal conductivity	1.5	2.0	3.0	ASTM D5470	W/m*K
Thermal impedance@20 psi	0.634	0.533	0.574	ASTM D5470	°C-in ² / W
Thermal impedance@60 psi	0.451	0.386	0.393	ASTM D5470	°C-in ² / W
Thermal impedance@100 psi	0.410	0.362	0.361	ASTM D5470	°C-in ² / W

Note: All specifications provided by LiPOLY are subject to change without notice. The test methods used by LiPOLY are based on the TIM Tester method and ASTM D5470 test method. These test methods are used as the definition standards for LiPOLY. Property values provided in this document are not for product specifications or guaranteed. This document does not guarantee the performance and quality required for the purchaser's specific purpose. The purchaser needs to evaluate and verify the safety before using the material. We strongly recommend the purchaser pre-test the product and verify the performance of the product under the purchaser's specific conditions. Liability and use of the product are the responsibility of the end user. LiPOLY makes no warranty as to the suitability, merchantability, or non-infringement of any LiPOLY material or product for any specific or general uses. LiPOLY shall not be liable for incidental or consequential damages of any kind. All LiPOLY products are sold in accordance with the LiPOLY Terms and Conditions in effect at the time of purchase and a copy of which will be furnished upon request. All rights reserved, including LiPOLY trademarks or registered trademarks of LiPOLY or its affiliates. Statements concerning possible or suggested uses made herein shall not be relied upon or be construed as a guaranty of patent infringement. Copyright 2023 LiPOLY.

SP22/23/33

Thermal Conductive Rubber Cap Series

LiPOLY SP is a stereoscopic thermal conductive silicone rubber cap as substrate through a special production process. Due to its excellent characteristic of high thermal conductivity, insulation, shockproof and convenient assembly, it is widely used in heat transistor refer to TO220 / TO3P, diode, triode.

■ FEATURES

- / Thermal conductivity: 0.8 W/m*K
- / Good insulator
- / High recovery
- / Easy to assemble
- / Available in a range of thicknesses

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Notebook computers
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

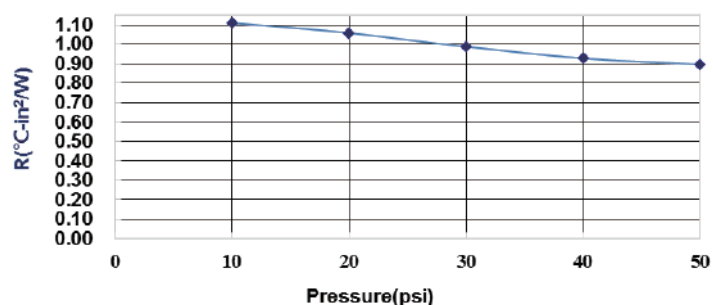
- / SP22-11.4 x 16x5.8mm
- / SP23-11.4 x 21.5x5.8mm
- / SP33-17.5 x 28.5x5.8mm



■ TYPICAL PROPERTIES

PROPERTY	SP22/23/33	TEST METHOD	UNIT
Color	Gray	Visual	-
Resin base	Silicone	-	-
Thickness	0.3 / 0.45	ASTM D374	mm
Density	1.8	ASTM D792	g/cm ³
Hardness	55	ASTM D2240	Shore A
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	1	ASTM D5470 modify	%
Deflection @20 psi	2	ASTM D5470 modify	%
Deflection @30 psi	3	ASTM D5470 modify	%
Deflection @40 psi	4	ASTM D5470 modify	%
Deflection @50 psi	5	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	7 / 8	ASTM D149	KV/mm
Surface resistivity	>10 ¹²	ASTM D257	Ohm
Volume resistivity	>10 ¹³	ASTM D257	Ohm-m
THERMAL@0.3mm			
Thermal conductivity	0.8	ASTM D5470	W/m*K
Thermal impedance@10 psi	1.110	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	1.058	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.988	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.929	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.897	ASTM D5470	°C-in ² / W

Thermal Resistance vs. Pressure



CP-S

Thermal Conductive Rubber Cap

LiPOLY CP-S is a stereoscopic thermal conductive silicone rubber cap as substrate through a special production process. Due to its excellent characteristic of high thermal conductivity, insulation, shock-proof and convenient assembly, it is widely used in heat transistor refer to TO220 / TO3P, diode, triode.

■ FEATURES

- / Thermal conductivity: 2.5 W/m*K
- / Good insulator
- / High recovery
- / Easy to assemble
- / Available in a range of thicknesses

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Notebook computers
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

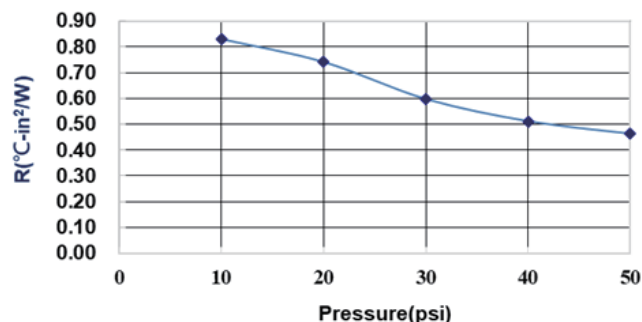
- / 11.4 x 16x5.8mm
- / 11.4 x 21.5x5.8mm
- / 17.5 x 28.5x5.8mm



■ TYPICAL PROPERTIES

PROPERTY	CP-S	TEST METHOD	UNIT
Color	Gray	Visual	-
Resin base	Silicone	-	-
Thickness	0.30 / 0.45	ASTM D374	mm
Density	2.3	ASTM D792	g/cm ³
Hardness	65	ASTM D2240	Shore A
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	1	ASTM D5470 modify	%
Deflection @20 psi	2	ASTM D5470 modify	%
Deflection @30 psi	4	ASTM D5470 modify	%
Deflection @40 psi	5	ASTM D5470 modify	%
Deflection @50 psi	6	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	7 / 8	ASTM D149	KV/mm
Surface resistivity	>10 ¹²	ASTM D257	Ohm
Volume resistivity	>10 ¹³	ASTM D257	Ohm-m
THERMAL			
Thermal Conductivity	2.5	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.830	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.741	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.597	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.511	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.462	ASTM D5470	°C-in ² / W

Thermal Resistance vs. Pressure



Thermal Conductive Rubber Tube

LiPOLY TP200 is a stereoscopic thermal conductive silicone rubber cap as substrate through a special production process. Due to its excellent characteristic of high thermal conductivity, insulation, shockproof and convenient assembly, it is widely used in heat transistor refer to T0220 / T03P, diode, triode.

■ FEATURES

- / Thermal conductivity: 0.8 W/m*K
- / Good insulator
- / High recovery
- / Easy to assemble
- / Available in a range of thicknesses

■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Notebook computers
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

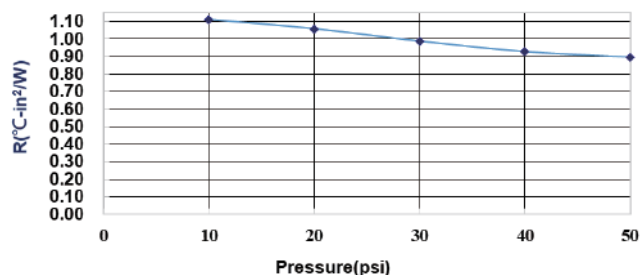
- / Diameter/Length:11mm/25mm
- / Diameter/Length:13.5mm/25mm
- / Diameter/Length:11mm/30mm
- / Diameter/Length:13.5mm/30mm



■ TYPICAL PROPERTIES

PROPERTY	TP200	TEST METHOD	UNIT
Color	Gray	Visual	-
Resin base	Silicone	-	-
Thickness	0.3	ASTM D374	mm
Density	1.8	ASTM D792	g/cm ³
Hardness	55	ASTM D2240	Shore A
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	1	ASTM D5470 modify	%
Deflection @20 psi	2	ASTM D5470 modify	%
Deflection @30 psi	3	ASTM D5470 modify	%
Deflection @40 psi	4	ASTM D5470 modify	%
Deflection @50 psi	5	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	7	ASTM D149	KV/mm
Surface resistivity	>10 ¹²	ASTM D257	Ohm
Volume resistivity	>10 ¹³	ASTM D257	Ohm-m
THERMAL@0.3mm			
Thermal conductivity	0.8	ASTM D5470	W/m*K
Thermal impedance@10 psi	1.110	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	1.058	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.988	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.929	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.897	ASTM D5470	°C-in ² / W

Thermal Resistance vs. Pressure



Complex Thermal Conductive Film

LiPOLY TR332CU is a complex thermally conductive film, composed of graphite radiator which can be laminated on copper foil to superior thermal management and ease of manufacture. TR332CU can be supplied in various manufacturing friendly formats and custom die-cut for the ultimate convenience.

■ FEATURES

- / Excellent heat transfer
- / Manufacturing friendly form-factor
- / Can be custom die-cut
- / Flexibly conforms to surfaces

■ TYPICAL APPLICATION

- / Set top box
- / Notebook Computers
- / Projector
- / Mobile phone
- / Hand held devices
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

- / Sheet form
- / Die-cut parts

■ TYPICAL PROPERTIES



PROPERTY	TR332CU		TEST METHOD	UNIT
Color	Black		Visual	-
Thickness	0.10	0.15	ASTM D374	mm
TML	<0.1	<0.1	By LiPOLY	%
Application temperature	-60~120	-60~120	-	°C
Short time temp. @30sec	150	150	-	°C
ADHESION				
Initial tack	25	11	PSTC-6	cm
RADIATION				
Heat emissivity coefficient	0.96	0.96	ASTM C1371	-
ELECTRICAL				
Dielectric breakdown	1	1.5	ASTM D149	KV
Surface resistivity	>10 ¹¹	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹¹	>10 ¹¹	ASTM D257	Ohm-m
THERMAL				
Thermal conductivity XY axis	1500	1500	AC calorimeter	W/m*K
Thermal conductivity Z axis	1.2	1.2	Laser flash	W/m*K

G566A/G566AP

Artificial Graphite Sheet

LiPOLY G566 Graphite Sheet has great thermal conductivity on the X and Y axis. The thermal conductivity is 1700 W/m*K. It is flexible and bendable, which is suitable for thin products and high capability mobile devices.

■ FEATURES

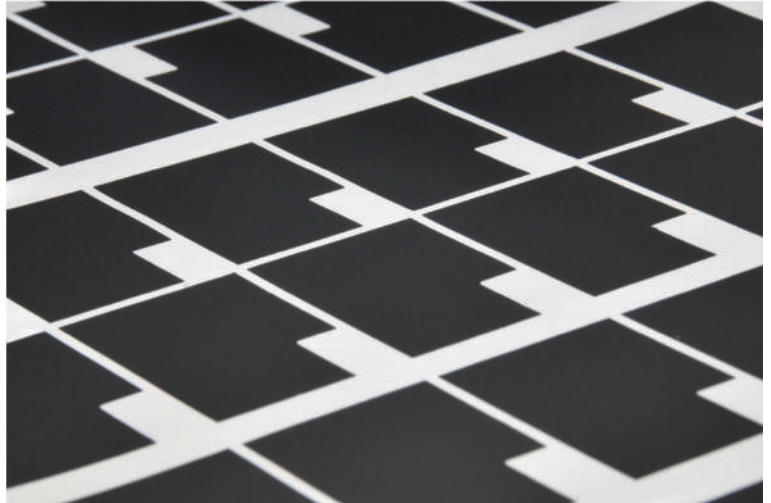
- / Thermal conductivity: 1500~1700W/m*K
- / Good average temperature
- / Easy to assemble
- / Lightweight, Specific gravity 2.1 g/cm³

■ TYPICAL APPLICATION

- / Smart phones, Mobile phones
- / LED, DVD appliance
- / Hand held devices
- / 5G base station & infrastructure
- / EV electric vehicle

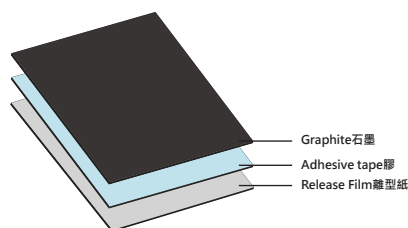
■ SPECIFICATIONS

- / Sheet form
- / Die-cut parts

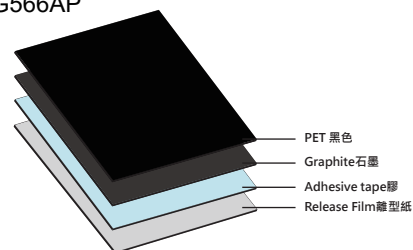


PROPERTY	G566A	G566AP	TEST METHOD	UNIT
Color	Black	Black	Visual	-
Surface tack 2-side/1-side	1	1	-	-
Thickness	35	45	Micrometer	μm
Density	2.1	2.1	Archimedes law	g/cm ³
Heat resistance	120	120	-	°C
Flexibility	Flexible	Flexible	-	-
ROHS & REACH	Compliant	Compliant	-	-
ELECTRICAL				
Electrical conductivity	20000	20000	JIS K7194	S/cm
THERMAL				
Thermal conductivity XY axis	1500~1700	1500~1700	AC calorimeter	W/m*K
Thermal conductivity Z axis	5	5	Laser flash	W/m*K
Thermal diffusivity	8.92	8.92	AC calorimeter	cm ² /s
Heat capacity(SHC)	0.895	0.895	-	J/g*K

G566A



G566AP



Shiu Li Technology has advanced manufacturing technology at our HQ in Taiwan. All of our products undergo extensive testing in our state-of-the-art experimental development lab and reliability testing lab. Shiu Li has top-of-the-line manufacturing technology, a complete experiment development lab, and an advanced reliability testing laboratory.

TESTING CAPABILITIES

- Thermal Resistance Testing
- Thermal Conductivity Testing
- Viscosity Testing
- Hardness Testing
- X-ray Testing
- Compression Force Testing
- Peeling Strength Testing
- Holding Power Testing
- Attenuation Testing
- Electrical Resistance Testing
- Dielectric Testing
- GC Testing
- Thermal Aging Testing
- Thermal HAST Testing
- Thermal Cycling Testing



Our Branches





2023 CATALOG



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