

Product Data

Thermally Conductive Silicone TIA223G-DG

TIA223G-DG is a 2-component, thermally conductive material for encapsulating, gap filling, and for use as a thermal path to heat sinks. The flowability of TIA223G-DG allows it to conform to complex 3-dimensional shapes and cavities in potting applications, while also enabling it to be transferred in a thin layer as a liquid-dispensed alternative to thermal pads. TIA223G-DG quickly cures to a soft rubber gel with exposure to heat, and will also cure at room temperatures.

KEY FEATURES

- Good thermal conductivity
- Fast cure with exposure to heat
- Easy to use 1:1 mixing ratio by weight or volume

APPLICATIONS

Thermal encapsulating, gap filling, and thermal interface to heat sinks in various electronic components.

TYPICAL PROPERTIES

Criteria		Properties	
		Part A	Part B
Color		Dark Gray	Light Gray
Mixing Ratio (by weight or volume)		100:100	
Viscosity (23°C) (after mixing)	Pa·s	40	
Pot Life	h	0.5	
Cure Condition (with heat)	°C/h	70 / 0.5	
Cure Condition (room temperature)	h	4	
Post-Cure Properties			
Density (23°C)	g/cm ³	2.79	
Thermal Conductivity ^{*1}	W/(m·K)	2.1	
Hardness (type E)		45	
Volume Resistivity	MΩ·m	4.8x10 ⁶	
Dielectric Strength	20kV/mm	20	
CTE	ppm/K	140	
Low Volatile Siloxane (D ₃ -D ₁₀)	ppm	<200	
^{*1} : Hot wire method			

HANDLING AND SAFETY

- Parts A and B should each be thoroughly stirred before mixing together, as filler sedimentation may occur during storage.
- Deaerate the mixture for 5 to 10 minutes to remove air entrapped during mixing.
- Wear eye protection and protective gloves as required while handling the product.
- Use the product in a well ventilated area.

STORAGE

- Store in a dark, cool place out of direct sunlight.

December 2011

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