

AOS SILICONE HEAT SINK CMPD

Product Code: 54013

TECHNICAL DATA SHEET



Product Description

AOS Silicone Heat Sink Compound is a silicone-based thermal grease made from a silicone fluid thickened with metal oxide fillers. The product offers high thermal conductivity, virtually no bleed or evaporation over a wide operating temperature range. It will not harden, dry out or melt after 1,000 hours at 200°C. Meets Mil-C-47009 and Mil-C-47113 Type I.

Product Features & Benefits

Grease-like consistency; opaque white in color; zero bleed; very stable at elevated temperatures; excellent thermal resistance and high thermal conductivity; efficient thermal coupler; effective and positive heat sink sealers and heat transfer agent.

Major Applications

Mounting transistors, diodes, rectifiers and resistors. Thermal joint compound for any device where efficient cooling is desired.

Methods of Application

By hand brushing or wiping. Also, automatic dispensing methods save labor and material.

Typical Properties

Property	<u>Value</u>	<u>Test</u> <u>Method</u>
Specific Gravity, @ 25°C	2.2	ASTM D-70
Bleed , @ 200°C, 24 Hrs., %/Wt	0.5 %	FTM-321 MODIFIED
Viscosity, 1 sec ⁻¹ , 25°C/50°C	432,000/415,000 cP	ARES G-2 RHEOMETER
Evaporation, @ 200°C, 24 Hrs., %/Wt.	0.5 %	FTM-321 MODIFIED
Thermal Conductivity, @ 36°C	0.70 W/m-K	ASTMD 5470-06
Thermal Resistance, @ 50°C	0.0410°C/W	Oracle TTV Model 270- 7806-01
Electrical Properties		, , , , , , , , , , , , , , , , , , , ,
Dielectric strength, 0.05" gap, V/mil	400	ASTM D- 149
Dielectric constant, 25°C @ 1,000 Hz	4.90	ASTM D- 150
Dissipation factor, 25°C @ 1,000 Hz	0.0011	ASTM D- 150
Volume Resistivity, ohm-cm	1.96×10^{15}	ASTM D- 257
Operating Temperature Range	-55°C to 205°C	
Flow Rate	5 to 18 g/min	AOS Method
Appearance	Smooth, Off- White Paste	
Shelf Life	5 Years	