

PRODUCT SPECIFICATIONS SHEET

<u>CAT NO.</u>	<u>PRODUCT NAME</u>
10-8109	Silicone (Z9)
10-8108	
10-8106	

DESCRIPTION:

Heat Sink Compound is silicone-based thermal grease made from a silicone fluid thickened with metal oxide fillers.

BENEFITS AND FEATURES:

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. 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.

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:

<u>Property</u>	<u>Value</u>	<u>Test Method</u>
Consistency (Penetration, worked, 60x)	340	ASTM D-217
Specific Gravity, @ 25°C	2.2	ASTM D-70
Bleed, @ 200°C, 24 Hrs., %/Wt	0.50	FTM-321 MODIFIED
Evaporation, @ 200°C, 24 Hrs., %/Wt.	0.50	FTM-321 MODIFIED
Thermal Conductivity, @ 36°C W/m.-K	0.70	ASTM D-5470-06
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 x 10 ¹⁵	ASTM D-257
Operating Temperature Range	-55°C to 205°C	
Flow Rate grams/min. @ 50PSI	5-18	
Appearance	White Paste	

SHELF LIFE, CLOSED CONTAINERS:

Product has a shelf life of up to 5 years from date of manufacture when stored in a sealed container at a temperature of 75°F. Extended shelf life is possible, but material should be checked for consistency before use and any excess oil should be removed.