

Accessory Products



THERMAL COMPOUNDS, ADHESIVES AND INTERFACE MATERIALS

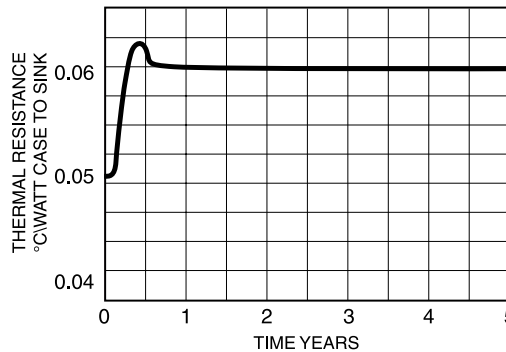
120 SERIES



The **120 Series** Silicone Oil-Based Thermal Joint Compound fills the minute air gap between mating surfaces with a grease-like material containing zinc oxide in a silicone oil carrier. It possesses an excellent thermal resistance of only 0.05°C/W for a 0.001 in. film with an area of one square inch. There is no measurable increase in case temperature of a mounted semiconductor on a heat sink after the 6-month stabilization period (Time versus Thermal Resistivity graph below).

TYPICAL VALUES FOR THERMAL RESISTANCE, CASE TO SINK (θ_{CS}) WHEN THERMAL JOINT COMPOUNDS ARE USED		
Case Style Characteristics	Mounting Torque in inch • pounds (N•M)	Typical Thermal Resistance (°C/W)
T0-3	8 (0.9)	0.09
T0-66	9 (0.9)	0.14
T0-220	8 (0.9)	0.50
0.19 (4.8) stud x 0.44 (11.2) hex	15 (1.7)	0.16
0.25 (6.4) stud x 0.69 (17.5) hex	30 (3.39)	0.10
0.38 (9.7) stud x 1.06 (26.9) hex	75 (8.47)	0.07
0.50 (12.7) stud x 1.06 (26.9) hex	125 (14.12)	0.07
0.75 (19.1) stud x 1.25 (31.8) hex	600 (67.79)	0.052

120 SERIES - THERMAL JOINT COMPOUND	
Characteristic	Description
Volume Resistivity	5 X 10 ¹⁴ ohm-cm
Dielectric Strength	225 volts/mil
Specific Gravity	2.1 min.
Thermal Conductivity @ 36°C	0.735 W/(m)(K)
	5.1(Btu) (in.)/(hr)(ft ²)(°F)
Thermal Resistivity (P)	56 (°C)(in.)/watt
Bleed, % after 24 hrs @ 200°C	0.5
Evaporation, % after 24 hrs @ 200°C	0.5
Color	opaque white
Shelf life	5 years
Operating Temperature Range (°C)	-40/+200



120 SERIES - ORDER GUIDE	
Series - P/N	Container Size
120-SA	4 gram plastic pak
120-2	2 oz (0.06 kg) jar
120-5	5 oz (0.14 kg) tube
120-8	8 oz (0.23 kg) jar
120-80	5 lb (2.27 kg) can
120-320	20 lb (9.08 kg) can

HIGH PERFORMANCE THERMAL COMPOUND

122 SERIES



122 Series Thermal Joint Compound is a stable, silicone based, thixotropic paste developed to provide premium performance at an affordable price. It is formulated to significantly reduce contact thermal resistance where power densities are concentrated in devices such as flip chip, reduced die size, and 'overclock' microprocessors. When applied as a thin film between a Wakefield heat sink and device it possesses superior thermal conductivity compared to traditional 'grease'. It is compatible with automated or manual dispensing methods and is fully RoHS compliant.

122 SERIES THERMAL JOINT COMPOUND	
Typical Characteristics	Description
Appearance	Smooth Gray paste
Thermal Conductivity	2.5 W / m °K, 17.3 (Btu) (in.)/(hr) (ft ²) (°F)
Thermal Resistance	0.02 °C in 2 / W
Bleed	0.015 wt%, 24 hrs at 200°C
Evaporation	0.150 wt%, 24 hrs at 200°C
Volume Resistivity	1.4 x 10 ¹⁰ ohm-cm
Dielectric Strength	225 volts/mil
Specific Gravity	2.23 (gm/cc) at 25°C
Operating Range	-40°C to 205°C
Shelf Life	5 years

122 SERIES - ORDER GUIDE	
Series - P/N	Container Size
122-10CC	10cc syringe
122-2	2 oz (0.06 kg) jar
122-30CC	30cc syringe

