

Technical Product Information

T660 High Performance Thermal Grease T650 General Duty Thermal Grease

DESCRIPTION

T660 High Performance Thermal Grease

Chomerics T660 (patent pending) is an innovative new approach to enhancing the performance of thermal grease. This thermal phase-change grease has been developed to meet the need for high power applications requiring a material with minimum bond line thickness and high conductivity. T660 is a non-curing, dispensable, highly conformable material which requires no cure cycle or mixing and dispenses to fill highly variable package tolerances. T660 grease contains small, performance enhancing conductive particles that melt at 62°C, resulting in a minimal bond line and high thermal conduction. The material is thermally stable and requires virtually no compressive force to deform under assembly pressure. Simply dispense the grease onto your component, assemble the heat sink or chassis over the material, and ship your product. The combination of minimal pressure and the melting of these particles create the proper environment for the grease to obtain a thin interface and the highest thermal conduction.

See **Table 1** for typical properties.

T650 General Duty Thermal Grease

Chomerics T650 is a thermal grease created to efficiently conduct heat and fill the voids between hot components and heat sinks. T-650 is a non-curing, dispensable, highly conformable material which requires no cure cycle or mixing and dispenses to fill highly variable tolerances in electronics assemblies. The material is thermally stable. It requires virtually no compressive force to deform under assembly pressure leaving solder joints and leads stress free. Simply dispense the grease onto your component, assemble the heat sink or chassis over the material, and ship your product. This material is ideal for rework and field repair situations. T650 requires no refrigeration, stores at room temperature and has no filler settling issues. The material is a one component compound, is easy to dispense, and has an indefinite shelf life.

See **Table 1** for typical properties.

APPLICATION:

Material is supplied in 3, 15 or 30cc syringes for easy dispensing onto components or heatsinks. Bulk packaging is also available. Excess material can be wiped up with a cloth and MEK or Toluene. For optimum performance, the processor should be allowed to reach temperatures greater than >62°C. This will cause the LMA particles to melt and conform to the mating surfaces, obtaining a minimum bond line at the interface. This process only needs to occur once for optimum thermal performance of the grease.

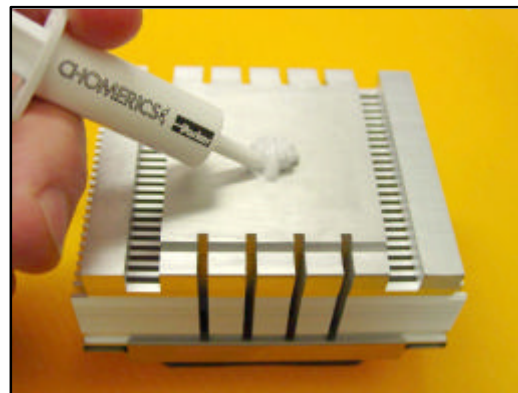


Table 1

Typical Properties	T660	T650	Test Method
Color	Pale gray	Blue	Visual
Thermal Impedance, K-in ² /W @ 50°C	0.020	0.021	ASTM D5470
Thermal Impedance, K-in ² /W @ 65°C	0.009	N/A	ASTM D5470
Thermal Conductivity, W/m-K	0.900	0.800	ASTM D5470
Specific Gravity	2.4	2.3	ASTM D792
Viscosity, cps	170,000	190,000	--
Volume Resistivity, ohm-cm	1 x 10 ¹⁴	1 x 10 ¹⁴	ASTM D257
Voltage Breakdown Vac/mil	NA	150	ASTM D149
Weight Loss %, @ 150°C, 48 Hours	0.17	0.21	TGA
Continuous Use Temperature, °C	-50 to +200	-50 to +200	--