Innovative Materials Manufacturer

Silicone Free Thermal Conductive Gel Series

[Thermal Gap filler]

DATA SHEET



FEATURES:

- High thermal conductivity, low thermal
- Working under low pressure
- No silicone oil volatilization, no pollution
- Excellent electrical insulation performance and heat resistance

APPLICATIONS:

- Semiconductor and radiators
- Optical precision equipment
- Vehicle electronics
- LED and Medical electronics
- CPU and GPU

STORAGE TEMPERATURE:-18℃

The series of products are accord with standards of RoHS and HALOGEN.

Silicon Free Thermal Gel is a thermal interface material without a low molecular siloxane. Silicone oil volatilization and pollution of components. It is especially suitable for places sensitive to silicone oil. Because its thickness is not sensitive and it has good adaptability in the equipment assembly-process, so that it is compatible with tolerance of the relevant devices or structures brotght by different Sizes.

PROPERTIES							
	Parameter			·			
Items	HTG-300SF	HTG-500SF	Unit	Test Method			
Appearance	White pasty substance	Grey pasty substance	-	Visual			
Density	3.11±0.5	3.05±0.5	g/cm³	ASTM D 792			
Volatilization Point	0	0		GB/T 269-1991			
Extrusion rate	10±3(@0.6Mpa)	5±2(@0.6Mpa)	g/min	-			
Needle penetration	24±3	16±3	mm	GB/T 4985-2010			
50% Instantaneous compressive stress	<40	<20	Psi	GB/T 7757-2009			
50% Static compressive stress	<1	<1	Psi	GB/T 7757-2009			
Adhesive force	<15	<15	Psi	-			
Operating Temperature	-50~150	-50~150	°C	-			

THERMAL CHARACTERISTIC						
Thermal Conductivity	3.0(±0.25)	5.0(±0.5)	W/m·K	ASTM D 5470		
Thermal Resistance	≤0.07(@20Psi)	≤0.06(@20Psi)	°Cin²/W	ASTM D 5470		
ELECTRICAL PROPERTIES						
Breakdown Voltage	≥8(@1mm)	≥8(@1mm)	KV	ASTM D 149		
Volume Resistivity	≥1.0*10 ⁸	≥1.0*10 ⁸	Ω.cm	ASTM D 257		

All above data are copyrighted and elaborated by HFC

STORAGE CONDITIONS:

- In order to ensure that the products maintain the quality, it should be kept in -18 ℃ temperature conditions.
- During the storage period, make sure that the container is sealed to protect electrical performance from external contaminants.

PACKING SPECIFICATIONS:

• 30cc/55cc/300cc