

Thermal Gel

Technical Data Sheet | 2020.6



The graphene filled thermally conductive gel features low density, low thermal impedance, high flow and gap filling capability. This best in class performance material allows various product designs where TIM materials with high performance and high reliability are required. The easy flow characteristic makes it conform easily to uneven surface or gap without causing undue stress on the electronic components. This gel is chemically inert and is weathering resistant even in harsh environments. It has very low oil bleeding, and does not contaminate the components.

Features

- Single part thermally conductive silicone gel
- High thermal conductivity, low interfacial thermal resistance
- Low stress, low modulus
- Excellent aging properties, high temperature resistance, weathering resistance
- Excellent chemical and mechanical stability, no degradation during use
- Excellent dielectric properties

Typical Applications

- Chassis or related heat conductive modules
- Smart devices, mobile phones, tablets
- Communication devices, semiconductor devices
- High-power LED lighting
- Power modules

Typical Properties	TCG-Gel 7000	Test Methods
Structure	Graphene filled silicone gel	--
Color	Green	Visual
Flow Rate, g/min - 30cc taper tip, 0.130" orifice, 90psi (621 kPa)	25	--
Thermal Conductivity (W/m·K)	4.0	ASTM D5470
Density (g/cc)	3.2	ASTM D792
Flammability Rating	V-0	UL94
Minimum BLT Thickness (mm)	100	--
Operating Temperature Range (°C)	-50~200	--
Heat Capacity (J/g·K)	1.1	ASTM E1269
Volatility%	< 0.01	ASTM E595
Coefficient of Thermal Expansion (ppm/K)	170	ASTM E831
Volume Resistivity (ohm-cm)	>10 ¹³	ASTM D257
Dielectric Strength (KV/mm)	> 5	ASTM D149

Application Tips

- Keep the product away from fire
- Please confirm the correctness of use before using
- Make sure the application interface is clean before use
- Use a pneumatic dispenser to point directly to the component, or other methods to dispense directly. This gel is reworkable and excess material can be easily wiped off

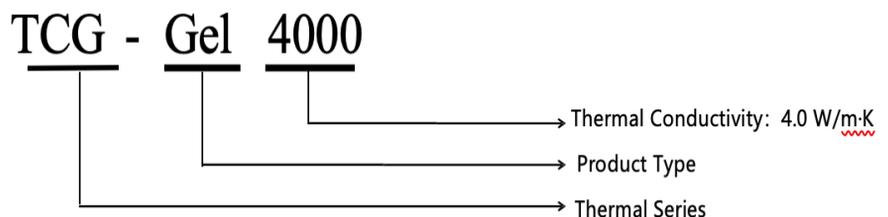
Storage and Expiration Date

- The product should be stored at room temperature. Shelf life is 12 months from the date of manufacture.

Package Packing Information

- Thermally conductive gel is available in 30cc (100 g/tube), and 300cc syringe package. Other sizes are available upon request.

Product Naming



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