TG2000I, 2800I, 3000, 3000I, 4000 and 5500 Thermal Silicone Grease

BENEFITS AND FEATURES

- Low viscosity and excellent thixotropy for dispensing, stencil printing, or screen printing
- Broad BLT range for different application
- Different thermal resistance and thermal conductivity for different power density
- High stability and reliability
- Stable homogeneous mixture under room temperature storage

TYPICAL APPLICATIONS

- CPU, GPU and chipsets
- LED assemblies
- Automotive electronics
- IGBT & power units
- Flip-chip BGAs

OVERVIEW

Honeywell TG series Thermal Silicone Grease products provide superior thermal performance with ease of use across multitude of applications. Its low viscosity and excellent thixotropy enable it fit for large—scale production with dispensing, screen printing and stencil printing. It is designed to minimize thermal resistance at interfaces, and maintain excellent performance through reliability testing. TG series products are designed with different thermal impedance and thermal conductivity to meet the different power density in real application. Products are also available with different BLT to meet different interface flatness.

STORAGE & USE

• Shelf life 12 months at 20-35°C, ≤65%RH

Property	TG2000I	TG2800I	TG3000	TG3000I	TG4000	TG5500	Test Method
Color	Blue	Yellow	Grey	White	Grey	Grey	Visual
Specific Gravity (g/cm³)	3.1	4.2	2.7	3.3	2.8	2.8	ASTM D792
Viscosity (Pa·s @25°C)	140	200	140	250	200	120	Brookfield Viscometer
Thermal Conductivity (W/m·K)	2.0	2.8	3.0	3.0	4.0	5.5	Hot Disk
Thermal Impedance (°C·in²/W)	0.029	0.014	0.014	0.005	0.011	0.010	ASTM D5470
(@35psi, 50°C, Typical Value)							
BLT(μm) (@35psi, 50°C)	35	25	25	7	25	25	HON Internal
Volume Resistivity (ohm-cm)	1.0 x 10 ¹³	1.0 x 10 ¹³	1.0×10 ¹²	1.0 x 10 ¹³	1.0 x 10 ¹²	1.0x10 ¹²	ASTM D257
Dielectric Constant @1MHz	>7	>9	>10	>5	>10	>10	ASTM D150
Flammability Rating	V-0(Equivalent)	V-0(Equivalent)	V-0(Equivalent)	V-0(Equivalent)	V-0(Equivalent)	V-0(Equivalent)	UL 94
Operating Temperature (°C)	-40~150	-40~150	-40~150	-40~150	-40~125	-40~125	HON Internal

^{*}Typical property data values should not be used as specifications

Honeywell Electronic Materials

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