

G3380N

Non-Silicone Thermal Interface Grease

LiPOLY G3380N is a range of silicone-free thermal grease used for the cooling of components which may be sensitive to silicone outgassing. G3380N can be applied manually, using automated dispensing systems or stencil printing for ease of manufacture.



Features-

- Thermal conductivity: 1.3 / 3.2 / 4.5 W/m*K
- No outgassing
- Low thermal impedance

Typical Applications-

- CPU and chip coolers
- Switching power supplies
- LED appliance
- Between any heat-generating component and heat sink

Specifications-

- Storage temp: RT25°C
- Shelf Life: 12 months from date of shipment

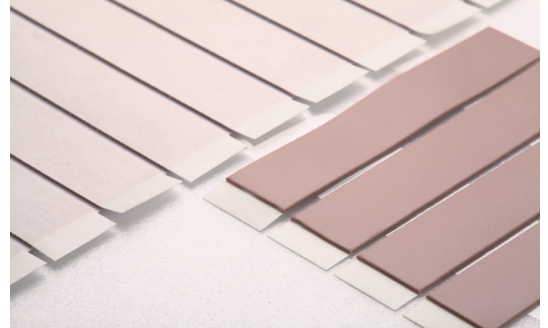
Typical Properties-

| PROPERTY | G3380NA | G3380NB | G3380NC | TEST METHOD | UNIT |
|--------------------------|-------------------|--------------|--------------|-------------|-----------------------|
| Color | White | Gray | Gray | Visual | - |
| Resin Base | Non-Silicone | Non-Silicone | Non-Silicone | - | - |
| Filler | Non-metal | metal | metal | - | - |
| Viscosity | 96 | 43 | 93 | ASTM D2196 | PaS |
| Density | 2.2 | 1.9 | 2.1 | ASTM D792 | g/cm ³ |
| Application temperature | -60~150 | -60~150 | -60~150 | - | °C |
| Bond Line Thickness | 55 | 33 | 72 | - | µm |
| ELECTRICAL | | | | | |
| Dielectric breakdown | 350 | N/A | N/A | ASTM D149 | V/mil |
| Surface resistivity | >10 ¹¹ | N/A | N/A | ASTM D257 | Ohm |
| Volume resistivity | >10 ¹¹ | N/A | N/A | ASTM D257 | Ohm-m |
| THERMAL | | | | | |
| Thermal Conductivity | 1.3 | 3.2 | 4.5 | ASTM D5470 | W/m*K |
| Thermal impedance@50 psi | 0.05 | 0.035 | 0.02 | ASTM D5470 | °C-in ² /W |
| Thermal impedance@50 psi | 32.2 | 22.5 | 12.9 | ASTM D5470 | °C-mm ² /W |

N700A/B

Non-Silicone Thermally Conductive Pad

LiPOLY N700A/B are silicone-free thermal interface materials which are suitable for the cooling of components which may be effected by silicone outgassing such as optical devices, automotive electronics or military hardware.



Features-

- Thermal conductivity: 1.5/3.0 W/m*K
- Silicone free formulation
- No outgassing
- Low contact thermal resistance
- Excellent breakdown voltage

Typical Applications-

- HDDS
- Optical appliance

Specifications-

- Sheet form
- Die-cut parts

Typical Properties-

| PROPERTY | N700A | | N700B | | TEST METHOD | UNIT |
|----------------------------|-------------------|--------------|-------------------|--------------|-------------|-----------------------|
| Color | Gray | | Red | | Visual | - |
| Surface tack 2-side/1-side | 2 | | 2 | | - | - |
| Thickness | 0.5~5.0 | | 0.5~5.0 | | ASTM D374 | mm |
| Density | 2.2 | | 2.6 | | ASTM D792 | g/cm ³ |
| Hardness | 60 | | 60 | | ASTM D2240 | Shore 00 |
| Application temperature | -60~125 | | -60~125 | | - | °C |
| Tensile Strength. | 20 | | 20 | | ASTM D412 | psi |
| Elongation | 40 | | 30 | | ASTM D412 | % |
| COMPRESSION | 1.0mm | 3.0mm | 1.0mm | 3.0mm | | |
| Deflection @10 psi | 10 | 46 | 27 | 55 | - | % |
| Deflection @20 psi | 26 | 67 | 42 | 75 | - | % |
| Deflection @30 psi | 43 | 79 | 51 | 82 | - | % |
| Deflection @40 psi | 52 | 84 | 58 | 86 | - | % |
| Deflection @50 psi | 64 | 88 | 63 | 89 | - | % |
| ELECTRICAL | | | | | | |
| Dielectric breakdown | >10 | | >10 | | ASTM D149 | kV/mm |
| Surface resistivity | >10 ¹¹ | | >10 ¹¹ | | ASTM D257 | Ohm |
| Volume resistivity | >10 ¹⁰ | | >10 ¹⁰ | | ASTM D257 | Ohm-m |
| THERMAL | | | | | | |
| Thermal Conductivity | 1.5 | | 3 | | ASTM D5470 | W/m*K |
| Thermal impedance@10 psi | 0.708 | | 0.392 | | ASTM D5470 | °C-in ² /W |
| Thermal impedance@20 psi | 0.445 | | 0.236 | | ASTM D5470 | °C-in ² /W |
| Thermal impedance@30 psi | 0.293 | | 0.169 | | ASTM D5470 | °C-in ² /W |
| Thermal impedance@40 psi | 0.225 | | 0.127 | | ASTM D5470 | °C-in ² /W |
| Thermal impedance@50 psi | 0.182 | | 0.101 | | ASTM D5470 | °C-in ² /W |
| FLAME RATING | | | | | | |
| UL Flammability class | V-0 | | V-0 | | UL94 | - |

※ These data are provided for reference only. Engineers are reminded to test the material in varied application.