

Thermal Compound 52055

Silicone-Free Thermal Interface Material



Thermal compound can be packaged in any size Nordson EFD syringe or cartridge along with 6 oz jars, 1 gallon pails, and 5 gallon pails.

The Non-Silicone Advantage

The no-creep feature extends circuit life by protecting components longer and eliminating premature failures caused by migrating fluid. Silicone-based compounds have an undesirable tendency to physically migrate and contaminate nearby components. This contamination can interfere with circuit operation long after hardware installation to cause unexpected and often inaccessible problems.

Thermal Compound 52055 synthetic non-silicone thermal grease is designed to have an extremely low thermal resistance for thin bond line applications. Durability is very high. It will not migrate with thermal cycling, making it ideal for applications requiring extended life with no degradation. It cleans with only water — no solvent required.

Features

- Non-metallic filler
- Low thermal resistance
- Thinnest bond line
- Water miscible while still hydrophobic

Benefits

- Easy to apply and water cleanable for frequent installation and removal
- Non-hazardous

Typical Applications

- Designed for burn-in stations
- CPU/GPU heat sink
- Power Semiconductors
- LEDs



more info



Typical Properties

| Characteristic | Conditions | Typical Value | Test Method |
|------------------------|----------------|-----------------------------|--|
| Specific Gravity | 25° C | 2.9 | ASTM D-70 |
| Bleed | 200° C, 24 hrs | 0% | FTM-321 Modified |
| Outgassing | 150° C, 24 hrs | <1.0% | FTM-321 Modified |
| Thermal Conductivity | 36° C | 1.5 W/m-K | ASTM D 5470-06 |
| Dielectric Strength | 0.05 in gap | 265 V/mil | ASTM D 5470-06 |
| Dielectric Constant | 25° C, 1000Hz | 5.02 | ASTM D-150 |
| Dissipation Factor | 25° C, 1000Hz | 0.0022 | ASTM D-150 |
| Electrical Resistivity | | 2.0x10 ¹⁵ ohm-cm | ASTM D-257 |
| Operating Temperature | | 0 to 180° C | |
| Bond Line (min) | | 0.0127 mm / 0.5 mil | |
| Bond Line (max) | | 0.127 mm / 5 mil | |
| Flow Rate | | 4.5 to 6.5 g/min | 30cc syringe barrel, 16 ga tapered tip, 50 psi |
| Viscosity | 1 sec-1, 25° C | 620 kCps | Ares G-2 Rheometer |
| | 1 sec-1, 50° C | 550 kCps | |
| Appearance | | Smooth white paste | |
| Shelf Life | | 1 Year | |



For Nordson EFD sales and service in over 40 countries, contact Nordson EFD or go to www.nordsonefd.com

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