

Thermal Compound 52054

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 52054 synthetic non-silicone thermal grease is designed to have an extremely low thermal resistance for thin bond line applications. Durability is best in class. It will not migrate with thermal cycling, making it ideal for applications requiring extended service life with no degradation.

Features

- Non-metallic filler
- Lowest thermal resistance on the market
- Thinnest bond line

Benefits

- Longest service life after application
- Non-hazardous

Typical Applications

- CPU/GPU heat sink
- Power Semiconductors
- LEDs



more info



Typical Properties

Characteristic	Conditions	Typical Value	Test Method
Specific Gravity	25° C	3.0	ASTM D-70
Bleed	200° C, 24 hrs	0.01%	FTM-321 Modified
Outgassing	150° C, 24 hrs	<2.0%	FTM-321 Modified
Thermal Conductivity	36° C	1.3 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		-40 to 180° C	
Bond Line (min)		0.0127 mm / 0.5 mil	
Bond Line (max)		0.127 mm / 5 mil	
Flow Rate		8 to 9 g/min	30cc syringe barrel, 16 ga tapered tip, 50 psi
Viscosity	1 sec-1, 25° C	470 kCps	Ares G-2 Rheometer
	1 sec-1, 50° C	410 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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