

Thermal Compound 53053

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.



more info

Thermal Compound 53053 is a dispensable, tacky, one part, non-metal particle filled gap filler intended to fill large air spaces between surfaces. The material has low bleed, phase separation, and migration under typical applications and will survive temperatures over 180° C for short periods.

Features

- One-part dispensable gap filler
- Non-metallic filler
- High conductivity

Benefits

- Lower cost gap filler
- Non-hazardous

Typical Applications

- Lighting
- Automotive
- Motors
- Battery systems
- Power devices



Typical Properties

Characteristic	Conditions	Typical Value	Test Method
Specific Gravity	25° C	2.7	ASTM D-70
Bleed	200° C, 24 hrs	<0.3%	FTM-321 Modified
Outgassing	150° C, 24 hrs	<0.5%	FTM-321 Modified
Thermal Conductivity	36° C	3.5 W/m-K	ASTM D 5470-06
Dielectric Strength	0.05 in gap	318 V/mil	ASTM D 5470-06
Dielectric Constant	25° C, 1000Hz	5.0	ASTM D-150
Dissipation Factor	25° C, 1000Hz	0.0027	ASTM D-150
Electrical Resistivity		2.15x10 ¹⁵ ohm-cm	ASTM D-257
Operating Temperature		-40 to 200° C	
Bond Line (min)		0.15mm / 6 mil	
Bond Line (max)		None / None	
Flow Rate		7 to 9 g/min	30cc syringe barrel, 16 ga tapered tip, 50 psi
Viscosity	1 sec-1, 25° C	1000 kCps	Ares G-2 Rheometer
	1 sec-1, 50° C	750 kCps	
Appearance		Off 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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