

Item # Tpcm FSF-52 /, Tpcm™ FSF-52 Phase Change Material



Tpcm™ FSF-52 Phase Change Material

Tpcm™ FSF-52 is a free standing film. It contains no substrate. At temperatures greater than 52°C, Tpcm™ FSF-52 changes into a molten state and, under low closure force, wets the heat sink and component surfaces to create a very thin, low thermal resistance interface.

Tpcm™ FSF-52 is thixotropic and won't flow from the interface. Tpcm™ FSF-52 has superior thermal performance comparable to the highest performing grease and phase change products available.

Since it is a free standing film, it is easy to handle and is a great replacement for messy grease.

Tpcm™ FSF-52 is available as individual die cut parts, kiss cut parts on rolls or sheets, and uncut rolls. Tpcm™ FSF-52 is 0.005" (0.125mm) and available with or without adhesive.

SPECIFICATIONS

Construction and Composition	Ceramic filled wax based free standing film
Color	White
Test Method - Color	Visual
Thickness	0.005 inches 0.125 mm
Thickness Tolerance	±0.001 inches ±0.025 mm
Density	2.00 g/cc
Test Method - Density	Helium Pycnometer
Shelf Life	Indefinite
UL Flammability Rating	94 V0
Maximum Temperature	200 °C
Phase Change Temperature	52 °C
Thermal Conductivity	0.90 W/m-K
Test Method - Thermal Conductivity	ASTM D5470
Thermal Resistance at 10 psi	0.042 °C-in ² /W 0.270 °C-cm ² /W

Thermal Resistance at 50 psi	0.030 °C-in ² /W 0.190 °C-cm ² /W
Test Method - Thermal Resistance	ASTM D5470 (modified)
Dielectric Constant at 1 kHz	3.8
Dielectric Constant at 1 MHz	3.40
Test Method - Dielectric Constant	ASTM D257
Volume Resistivity	7.9 x 10 ¹³
Sheet Size	9 x 9 inches 18 X 18 inches
Rolls	18" x 250 ft on 3" core 18" x 250 ft on 10" core
Pressure Sensitive Adhesive	Zone Coat