

Item # Tpcm HP105 /, Tpcm™ HP105 Phase Change Material



Tpcm™ HP105 Phase Change Material

High Performance Phase Change Material Tpcm™ HP105 is a high performance phase change product with exceptionally low thermal resistance. It has a softening range of approximately 50°C to 60°C. Proprietary technology prevents excessive pump-out after initial heat cycle. The material is naturally tacky and requires no adhesive coating or heatsink preheat for attachment. Tpcm HP105 does not cure and can be easily removed without pulling the processor out of the socket. It is supplied in rolls with a top tabbed liner for easy manual or large volume automated applications.

SPECIFICATIONS

Construction and Composition	Non-reinforced boron nitride filled film
Color	Off White
Test Method - Color	Visual
Thickness	0.005 inches 0.125 mm
Thickness Tolerance	±0.001 inches ±0.025 mm
Density	1.30 g/cc
Shelf Life	1 year
Temperature Range	-25 to 125 °C
Phase Change Softening Range	50 to 60 °C
Thermal Conductivity	0.73 W/m-K
Test Method - Thermal Conductivity	ASTM D5470 (modified)
Thermal Resistance at 10 psi	0.024 °C-in ² /W 0.150 °C-cm ² /W
Thermal Resistance at 50 psi	0.017 °C-in ² /W 0.110 °C-cm ² /W
Thermal Resistance at 100 psi	0.015 °C-in ² /W 0.100 °C-cm ² /W

Test Method - Thermal Resistance	ASTM D5470 (modified)
Volume Resistivity	3×10^{14} ohm-cm
Test Method - Volume Resistivity	ASTM D257
Sheet Size	9 x 9 inches