LTM6300, PCM45F, PTM5000, PTM6000, PTM7000, PTM7900, PTM7950

Thermal Phase Change Material



Honeywell's thermally conductive phase change material (PCM) is available in both pad and paste formats, and is designed to minimize thermal resistance at interfaces and maintain extremely stable performance through reliability testing required for long product life applications.

Based on a robust polymer PCM structure, this material exhibits excellent wetting properties during typical operating temperature ranges, resulting in very low surface contact resistance. The proprietary material provides superior reliability and maintains low thermal impedance, making PCM desirable for high-performance integrated circuit devices.



Performance	LTM Series	PCM45F Series	PTM5000 Series	PTM6000 Series ¹	PTM7000 Series	Test Method
Specific Gravity	1.8	2.2	2.3	2.3	2.7	ASTM D374
Thermal Conductivity (W/m·K)	1.8-2.4	2.0-2.5	3.5-4.5	3.5-4.5	6.0-8.5	ASTM D5470
Thermal Impedance @ no shim (°C·cm²/W)	0.12-0.14	0.09-0.12	0.06-0.08	0.06-0.08	0.04-0.06	ASTM D5470 Modified
Volume Resistivity (ohm·cm)	3.0×10 ¹⁵	8.2×10 ¹⁴	2.1×10 ¹⁴	2.1×10 ¹⁴	2.1×10 ¹⁴	ASTM D257
Thickness Range (mm) ²	NA	0.20-1.00	0.20-1.00	0.20-1.00	0.20-1.00	NA

- 1. PTM6000 has high reliability compared with PTM5000
- 2. PTM7950 is available only in 0.25mm thickness Thickness tolerance: ±0.075mm

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