

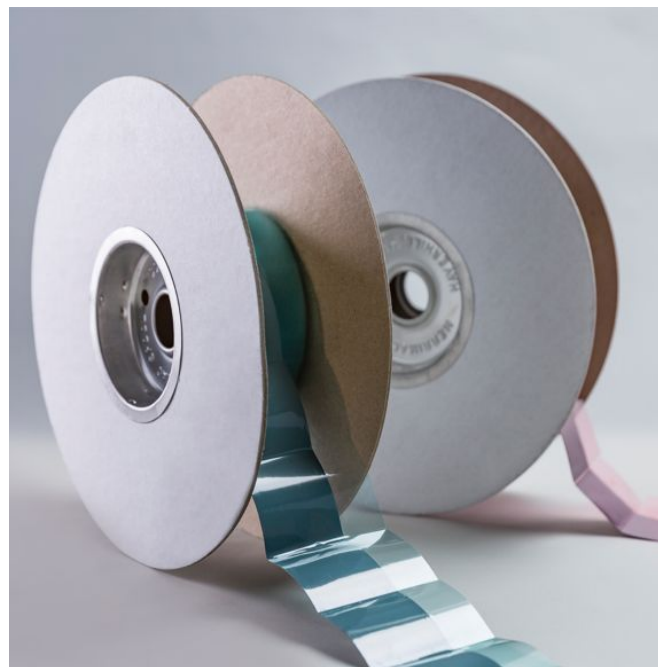
PHASE CHANGE MATERIALS

PTM7000 Series

Phase Change Materials (PCM) are often used as matrix materials for thermal interface applications with providing a thin bond line and high reliability without pump-out issues.

(6.0-8.5 W/m-K)

Overview



Phase change materials (PCM) are often used as matrix materials for thermal interface applications, because they are solid at room temperature, and soften when heated. They can fully fill the gaps of contact surfaces, therefore providing a thin bond line and high reliability without pump-out issues.

Typical Applications

- Power control unit, inverter, onboard electronics
- IGBT
- Servers, supercomputing, video graphic array (VGA) cards, AI, GPU/CPU/Desktop, solid state drives (SSD)
- Switches, routers, base stations
- Tablets, gaming, notebooks, smartphones, action cameras
- Lighting

Features

- High performance filler and polymer technology
- Phase change at 45 °C
- Highly conductive filler loading to optimize performance
- Superior handling and rework ability
- Superior reliable thermal performance
- Range of thermal properties to fit different needs

Specifications

THERMAL PROPERTIES

Thermal Conductivity

- 6.0-8.5 W/m-K, Test Method ASTM D5470

Thermal Impedance

- 0.04-0.06 at no shim °C·cm²/W, Test Method ASTM D5470 Modified

PHYSICAL PROPERTIES

Shelf Life

- 12 months Year

Specific Gravity

- 2.7, Test Method ASTM D374

Thickness (mm)

- 0.20-1.00

ELECTRICAL PROPERTIES

Volume Resistivity

- 2.1x10¹⁴ ohm-cm, Test Method ASTM D259

GENERAL INFORMATION

Application

- High Reliability

Key Features

- Low TI, High Reliability

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