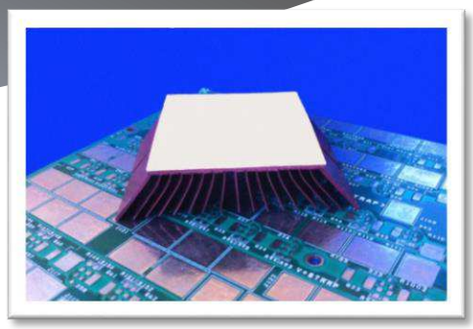
UniPhase 2000

Phase Change Interface Material



UniPhase 2000 is a phase changing thermal interface material, formulated to function as a superb alternative to messy and inconsistent thermal grease. Supplied as a dry compound coated onto an aluminium substrate **UniPhase 2000** will flow at a phase change temperature of 60°C and conform to the differing surface textures between a heatsink and device. In combination with device mounting pressure and phase change flow, **UniPhase 2000** expels air voids at the interface helping to reduce thermal resistance. **UniPhase 2000** is supplied in die-cut preforms to suit a wide variety of electronic applications such as DC/DC power converters and is typically between any heat dissipating electrically isolated component and heatsink.

Features

- Dry compound coated onto an aluminium substrate
- Above phase change temperature compound becomes thixotropic and paste-like in consistency
- Delivers a highly reliable and consistent thermal interface for demanding applications

Benefits

- Delivers a consistent and reliable thermal interface
- Mounting pressures and phase change flow expels air between uneven surfaces reducing thermal impedance
- Delivers a thin bond line between surfaces helping to improve thermal performance

Availability and Storage

- Supplied in custom die-cut preforms and pads on sheets or rolls
- Available in a variety of thicknesses to suit individual application requirements
- Indefinite shelf life, within original packaging in conditions below 40°C

Recommended Uses

- Typically used to thermally connect an electrically isolated heat generating component to a heatsink
- Within an application to replace thermal grease
- Power supplies and power modules

Physical Properties
(for a typical thickness)

Property (unit)	Test Method	UniPhase 2000
Total Thickness – includes compound and substrate (mm)	Visual	0.075
Max Operating Temp.(°C)	In House	+150
Thermal Impedance @ 20psi (°C-cm²/W)	ASTM D5470	0.2
Thermal Impedance @ 100psi (°C-cm²/W)	ASTM D5470	0.13

Mechanical Properties

Property (unit)	Test Method	UniPhase 2000
Phase Change Temperature (°C)	-	60
Volumetric Expansion upon phase-change (%)	In House	15%

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