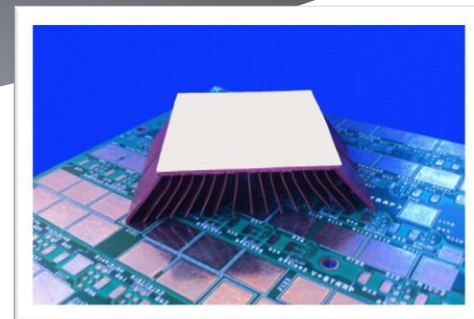


UniPhase 2000

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

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

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 |

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

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

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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This material is often used in these industries:



Industrial



Computing



Military



PSU

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