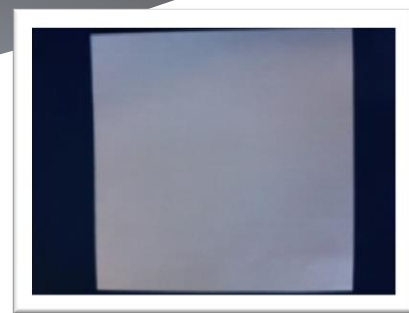


UniPhase 1000

Phase Change Interface



UniPhase 1000 is a repeatable high performance phase change, thermal interface material supplied on a non-reinforced thermally conductive film.

UniPhase 1000 will soften at temperatures between 50°C to 60°C, the compound at this stage obviates micro-air voids at the interface between two imperfectly mating surfaces and ensuring thermal connection. UniPhase 1000 delivers exceptionally low thermal resistance via a very thin bond line of 0.125mm. The material will not pump out or cure during operation and is naturally tacky therefore no additional adhesive is required. UniPhase 1000 once applied can be easily removed without causing any component damage.

Features

- Consists of a dry-compound coated onto a non-reinforced film
- Thermal conductivity = 1.0 W/mK
- Will not pump out after initial heat cycle
- Naturally tacky, no additional adhesive is required

Availability

- Standard thickness of 0.125mm
- Available as custom die-cut shapes and forms
- Supplied on rolls with a tabbed liner for easy manual or large volume application

Benefits

- Highly reliable and repeatable thermal solution
- Very thin bond line for reduced thermal resistance
- Supplied with a tabbed liner for easy manual handling and application or large volume automated lines

Recommended Uses

- Cooling microprocessors
- Thermally coupling chipsets and other heat-generating components within PSUs
- Graphic processing chips
- LED lighting assemblies

Physical Properties

Property (unit)	Test Method	UniPhase 1000
Colour	Visual	White
Total Thickness (mm)	Visual	0.125
Operating Temp.(°C)	In House	-25 to +120
Thermal Conductivity (W/mK)	ASTM D5470	1.0
Thermal Impedance @ 69Kpa (°C-cm²/W)	ASTM D5470	0.22
Thermal Impedance @ 689Kpa (°C-cm²/W)	ASTM D5470	0.13

Mechanical and Other Properties

Property (unit)	Test Method	UniPhase 1000
Density (g/cc)	-	1.25
Phase Change Softening Temperature (°C)	In House	55
Thickness Tolerance (mm)	In House	±0.02
Volume Resistivity (Ω-cm)	ASTM D257	3 x 10 ¹⁴



www.universal-science.com

UK +44 (0) 1908 222 211 NL +31 (0) 35 5239 209

IT +39 (02) 395 613 61 FR +33 (0) 1602 00276

USA +1 440 382 1077



This material is often used in these industries:



Industrial



Computing



Military



PSU

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