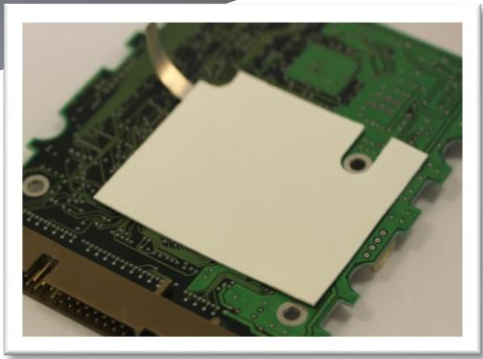


UniShield 6500

RFI Shielded Pad



UniShield 6500 is a unique part developed in-house by Universal Science. It functions to remove unwanted radio frequency interference (RFI) and unwanted electrical coupling that can often exist between high switching devices and heatsink. **UniShield 6500** consists of a thermally conductive, electrically isolating pad with an embedded copper foil laminated inside the part. The copper within **UniShield 6500** acts as a Faraday shield to remove RFI, however it also acts an excellent heat spreader.

Features

- RFI shield that removes unwanted electrical coupling and heatsink becoming an antenna
- Thermal conductivity = 6.5 W/mK
- Electrically isolating thermal interface material within copper Faraday shield

Availability

- Standard overall thickness of 0.6mm
- Available as custom made parts based on customer design, specification and the application

Benefits

- Guaranteed electrical isolation and superb thermal conductivity
- No radio frequency interference between device and heatsink

Recommended Uses

- Aerospace applications
- Any application where RFI needs to be eliminated in combination with excellent thermal performance

Typical Physical Properties

Property (unit)	Test Method	UniShield 6500
Colour	Visual	White
Thermal Conductivity (W/mK) (Insulator)	ASTM D5470	6.5
Thermal Conductivity (W/mK) (Copper layer)	-	270
Hardness (Shore A)	ASTM D2240	75
Thermal Impedance (°C - cm²/W @ 69KPa)	ASTM D5740	1.68
Operating Temp. (°C)	In House	-40 to +125
Flame Rating	UL94	V0

Electrical and Mechanical Information

Property (unit) insulators	Test Method	T-Pad 6500 (0.2mm)
Breakdown Voltage (Volts AC)	ASTM D149	>4000
Dielectric Constant (@1MHz)	ASTM D150	3.1
Volume Resistivity (Ω-cm)	ASTM D257	2 x 10 ¹¹
Outgassing CVCM (%)	ASTM E595	0.04
Density (g/cc)	-	1.46
Copper 0.1 mm thickness	-	Half hard tin plated



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This material is often used in these industries:



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