

# T-Pad 6500

## Thermally Conductive Pad



**T-Pad 6500** is a non-silicone electrically isolating thermal interface material that delivers an exceptionally high level of thermal conductivity of 6.5W/mK.

**T-Pad 6500** is highly suited for rugged and extremely demanding applications as well as silicone sensitive applications. Its inherent softness removes micro air voids between contact surfaces at the interface. The cold-flow action of **T-Pad 6500** mounted to a cold wall or chassis, via a spring, metal clip or clip, delivers reliable and high thermal performance whilst also guaranteeing electrical isolation.

### Features

- High dielectric strength and thermal performance
- Thermal conductivity of 6.5W/mK
- Soft and compliant to minimise interfacial thermal resistance but rugged and strong in its application

### Availability

- Available in standard thicknesses of 0.2mm
- Supplied with a pressure sensitive and thermally conductive adhesive on one side
- Standard sheet sizes of 356mm x 406mm
- Custom die-cut parts are also available

### Typical Physical Properties

Property (unit)	Test Method	T-Pad 6500 (0.2mm)
Colour	Visual	Light blue
Thermal Conductivity (W/mK)	ASTM D5470	6.5
Hardness (Shore A)	ASTM D2240	75
Thermal Impedance ( $^{\circ}\text{C}\text{-cm}^2/\text{W}$ @ 689KPa)	ASTM D5470	0.95
Operating Temp. ( $^{\circ}\text{C}$ )	-	-40 to +125
Flame Rating	UL94	V-0

### Benefits

- Guaranteed electrical isolation
- Fills micro air voids between device and mating metal work at the interface, improving thermal performance
- Maintains temperature stability over a wide range of temperatures

### Recommended Uses

- Mounting heat generating electronic devices or PCB's to a cold wall, chassis or heatsink
- Cooling power devices mounted to a heatsink or chassis in PSUs
- Thermally coupling TO220 and TO247 devices to heatsinks or nearby metal work

### Electrical and Mechanical Information

Property (unit)	Test Method	T-Pad 6500 (0.2mm)
Breakdown Voltage (Volts AC)	ASTM D149	>4000
Dielectric Constant (@1MHz)	ASTM D150	3.1
Volume Resistivity ( $\Omega\text{-cm}$ )	ASTM D257	$2 \times 10^{11}$
Outgassing CVCM (%)	ASTM E595	0.04
Density (g/cc)	-	1.46



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