

### DATA SHEET

#### Heatsink

Order code	Manufacturer code	Description	
38-3034	n/a	T-PAD 1500 100X100MM SHEET (RC)	
38-3036	n/a	T-PAD 1500 TO220 PAD (WITH HOLE) RC	
38-3038	n/a	T-PAD 1500 TO-3P (WITH HOLE) RC	
38-3056	n/a	T-PAD 1500 TO220 PAD (NO HOLE) RC	

Heatsink	Page 1 of 3
The enclosed information is believed to be correct, Information may change 'without notice' due to	Revision A
product improvement. Users should ensure that the product is suitable for their use. E. & O. E.	04/07/2003

Sales: 01206 751166 Technical: 01206 835555 Fax: 01206 7551188 Sales@rapidelec.co.uk Tech@rapidelec.co.uk www.rapidelectronics.co.uk



# Industry Leading Electrical Insulation

T-Pad1500 is designed to thermally connect hot electronic devices to cold walls, chassis or nearby metal work whilst maintaining electrical isolation.

T-Pad1500 traditionally replaces a mica washer and thermal grease in one material by filling the micro-air voids between device and heat sink whilst providing electrical isolation.

#### Typical applications include:

- · Cooling power devices mounted to heat sink or chassis in PSU's
- · Isolate FR4 Pcb thermal via holes from metal cast heat sink below.
- · TO220 and TO247 devices thermally coupled to heat sinks

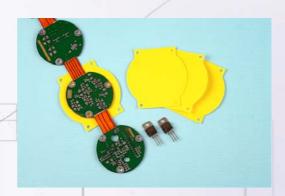


## Technical Specification

T-Pad1500 is a leading electrical insulator with high thermal performance.

With a thermal conductivity of 1.5W/mK and soft surfaces on both sides of the material T-Pad1500 has very good thermal "wet out" thereby coupling the device to the heatsink. Micro air voids are removed by the cold flow action of the material and thermal resistance is reduced to a minimum.

T-Pad1500 has a combination of thermal fillers and silicon to bind and provide good temperature stability over a wide range of temperatures. This combination makes T-Pad1500 ideal for automotive, telecom and aerospace applications requiring large temperature excursions and guaranteed electrical isolation.







## Technical Expertise

Material Properties	T-Pad1500 (0.23)	Unit	Test Method
Hardness	75	Shore 00	ASTM D2240
Tensile Strength	20	N/mm	ASTM D412
% Elongation	10	%	ASTM D412
Maximum Use Temp	-50 to +200	°C	
UL rating	vo	UL94	
Thermal Conductivity	1.5	W/mK	ASTM D5470
Thermal Impedance	2.90	Kcm²/W	ASTM D5740 @69 kPa
Breakdown Voltage	>6k	Volts AC	ASTM D149
Dielectric Constant	4.61	@1MHz	ASTM D150
Colour	Yellow		Visual
Dielectric constant	6.0		
Outgassing CvCM	0.04	%	ASTM E595

T-Pad1500 is available in thickness of 0.23mm and in roll form slit to desired width

The standard sheet sizes are:

229mm x 229mm

457mm x 457mm

T-Pad1500 can be supplied with thermal conductive adhesive on 1 or 2 sides.

T-Pad1500 can be supplied die cut into custom shapes from Universal Science.

Our customers are responsible for the testing of materials quoted and assurance that the materials purchased are fit for their purpose. Any information furnished by Universal Science regarding technical data is believed to be accurate and reliable but the customer bears the responsibility in assessing fitness for purpose. Universal Science makes no warranties as to the fitness, merchantability or suitability of any materials or products for any specific or general uses. Universal Science shall not be liable for the incidental or consequential damages of any kind.

All products are sold pursuant to the Universal Science terms and conditions of sale in effect at the time of delivery.