TIP1500, 3500 and 5000 Thermal Insulator Pad with High Thermal Conductivity

BENEFITS AND FEATURES

- High thermal performance
- High breakdown voltage
- Good resistant to tears, cut-throughs and punctures
- Single side PSA available for easy assembly

OVERVIEW

Honeywell TIP1500 & TIP3500 thermal insulators are designed to provide low thermal impedance and high isolation for high power and high voltage applications. Integrated fiberglass reinforcement protects the pad from tears, cut-throughs and punctures. TIP1500 and TIP3500 are designed to be soft and conformal which provide excellent mating surface for low pressure mounting. TIP1500 only offers 0.19mm and 0.23mm thickness. TIP3500 and TIP5000 offers in thicknesses ranging from 0.25mm to 0.50mm.

TYPICAL APPLICATIONS

- Automotive electronics
- Power conversion equipment
- Power supply equipment
- Motor controllers
- Speaker amplifier
- Power switch

STORAGE & USE

• Shelf life 12 months at 0-35°C, ≤65% RH

Property		TIP1500	TIP3500	TIP5000	Test Method
Color		Pink	Blue	Light blue	Visual
Thickness (mm) 1*		0.19, 0.23	0.25-0.50	0.25-0.50	ASTM D374
Density(g/cm³)		2.21	2.47	2.50	ASTM D792
Hardness (Shore A)		90	75	90	ASTM D2240
Thermal Conductivity (W/m·K)		1.5	3.5	5.0	ASTM D5470
Thermal Impedance	@10psi	0.91	0.33	0.26	ASTM D5470
(°C·in²/W) Typical Value	@50psi	0.54	0.18	0.15	
Breakdown Voltage (KV)		>6	>6	>5	ASTM D149
Dielectric Constant@1MHz		5.5	3.3	3.5	ASTM D150
Volume Resistivity (ohm-cm)		1.0x10 ¹³	5.0x10 ¹³	5.0x10 ¹³	ASTM D257
Flammability Rating		V-0(Equivalent)	V-0(Equivalent)	V-0(Equivalent)	UL 94
Operating Temperature (°C)		-60~200	-60~200	-60~200	HON Internal

^{1*}Thickness range: TIP1500: ±0.01mm, (±0.02mm for single side PSA product) TIP3500: ±10%

Honeywell Electronic Materials

TIP5000:+10%

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