

# PAKCOOL® Thermally Conductive Pad TP-220-HT

### **Key Features and Benefits**

- Thermal Conductivity: 2.0W/m·K
- Superior high and low temperature resistance, excellent weather resistance
- Superior chemical and mechanical stability
- Can effectively protect electrical components

### **Description**

PAKCOOL® TP-220-HT thermally conductive pads are designed with high thermal conductivity and high strength to meet the diverse needs of thermal management. This series of products offers a wide range of thermal conductivities and is suitable for various applications. PAKCOOL® TP-220-HT is widely used in communication equipment for its extremely low oil permeability. Under moderate application pressure, PAKCOOL® TP-220-HT series production can fill the air gaps between components and their heat-sinks and enhance heat transfer. PAKCOOL® TP-220-HT is electrical insulation and has high thermal conductivity at pressures ranging from 20 to 100 psi (0.14 to 0.69 MPa). Products can be customized to meet customer's special requirements.

PAKCOOL® TP-220-HT is a hardness enhancement version of PAKCOOL® TP-220, with excellent mechanical strength and elasticity. PAKCOOL® TP-220-HT can be provided in standard size with different thicknesses, or die cutting according to customer requirements.

## **Applications:**

- LED
- Power modules
- Integrated chips
- Automotive Electronics
- Communication devices
- Computers and Accessories

#### **Technical Parameters**

Typical Properties	ТР-220-НТ	Test Methods
Color	Gray	Visual
Thermal Conductivity (W/m·K)	2.0	ASTM D5470
Thermal Impedance @20psi,0.5mm (K-in²/W)	0.98	ASTM D5470
Thickness* (mm)	0.3—5.0	ASTM D374
Density (g/cm <sup>3</sup> )	2.83±0.05	ASTM D792
Hardness (Shore A)	60±10	ASTM D2240
Tensile Strength (Psi)	≥100	ASTM D412
Volume Resistivity (Ω·cm)	$\geq 1.0 \times 10^{13}$	ASTM D257
Dielectric Strength (kV/mm)	≥12	ASTM D149
Dielectric Constant (100KHz)	5.5	ASTM D150
UL Flammability Rating	V-0	UL 94
Continuous Use Temperature (℃)	-40 ~ +200	
*Standard Thickness (mm): 0.3, 0.5, 1, 1.5, 2, 2.5, 3,		

\*Standard Thickness (mm): 0.3, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5

Note: Data is for guidance only and should not be used as product specifications.

### **Configuration:**

- Sheet form or die-cut form
- without pressure sensitive adhesive
- Standard dimension for sheet is 200mm × 400mm
- Custom dimensions are available

#### **Storage:**

- Store in a cool, dry place out of direct sunlight
- Suggest the shelf-time not more than 24 months

The data of this specification are obtained under laboratory conditions. However, because of the difference of use environment, process and so on, it can not guarantee the correctness and applicability of the product in some usage and use. When using, be sure to test to confirm the product suitable for your purpose. If you have any problems in using this product, please contact our technical department. We will do our best to help you.