Thermal Pad 21-1500

Description

Through orientation technology, this soft and conformable thermal pad is designed to provide high level of thermal performance with minimum pressure on electronic components. 21-1500 is both side non-tacky pad, we can also provide single-side tacky 21-1500A pad.
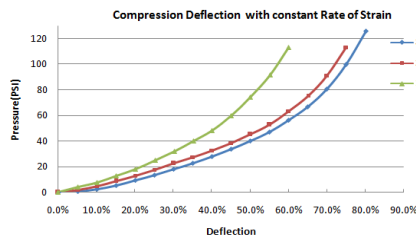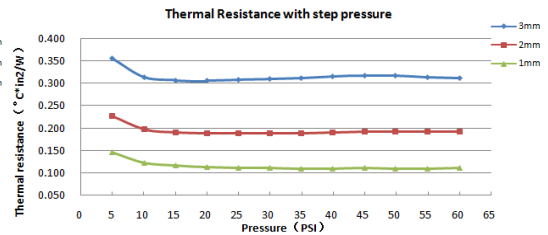
Typical Properties

Properties			21-1500			Test Method
Thermal	Thermal Conductivity (W/m-K)*	21-1500(non-tacky)	15			ASTM D5470
		21-1500A(single-side tacky)	13			
	Thermal Resistance (°C*cm2/W)	Thickness(mm)	1.0	2.0	3.0	ASTM D5470
		Thermal resistance @10Psi pressure(°C*cm2/W)	0.84	1.39	1.87	
	Continuous Use Temp (℃)		-55-150℃			
Physical	Color		Dark gray			Visual
	Hardness(Shore 00)		50			ASTM D2240
	Density (g/cc)		2.62			ASTM D792
	Thickness Range (mm)		1.0-5.0			ASTM D374
Electrical	Volume Resistivity (ohm-cm)		>10^5			ASTM D257
	Dielectric Breakdown Voltage (KVAC/mm)		<0.1			ASTM D149
Regulatory	RoHS Compliant		YES			
	Flame Rating		V0			UL 94
	Shelf Life (months)		12			

* The value of thermal conductivity is measured except contact thermal resistance.

Benefits

- High thermal conductivity：
  15W/m-K in thickness direction
- Soft: Outstanding compressibility
- Carbon fiber aligning
- RoHS Compliant

Applications

- Base station, IGBT module
- Optical transceiver
- Mass Storage Devices
- Power Electronics

Compression Deflection

21-1500 Gap Pad 1.0/2.0/3.0mm thick;
1 inch^2 test sample;
Rate of strain =1mm/min

Thermal Resistance VS Compression

21-1500 Gap Pad 1.0/2.0/3.0mm thick;
1 inch^2 test sample;
Pressure step = 5psi

Recommended Compression: 10--30%, which can keep the thermal conductive structure.
Standard Size: 2" X 2" (50mmX50mm)
Storage Requirement: Room Temperature(20 to 25ºC), R.H. 50%