# High Thermally Conductive Gap Filler Pad

## THERM-A-GAP™ TPS60

#### **Customer Value Proposition:**

Thermal-A-Gap TPS60 is a thermal putty material with exceptional thermal conductivity, high conformability and very low deflection force. Different from most existing high modulus high thermal conductivity pads, TPS60 has a naturally tacky surface and could be applied without a pressure sensitive adhesive. It is designed for applications requiring effective heat dissipation, low compression forces and minimal contact resistance.

The thermally conductive putty pads are used to fill air voids between high temperature components or PC boards and heat sinks, metal enclosures, and chassis. The conformability and the tacky surface of these putty pads enable low contact resistance under low applied pressure, reduce the risk of damaging the fragile components, and ensure fast heat transfer away from electronic components. These products provide superior performance and long term thermal stability over conventional thermal pads.



## Contact Information:

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- High thermal conductivity

Features/Benefits:

The unique formulation of the material makes it a high performance product for critical heat dissipation applications. Two carrier versions are available for improved tear resistance and mechanical integrity. "F" vesion is with fabric sandwiched in

- Highly conformable, soft
- Low deflection force
- Electrically isolating
- RoHS compliant

### **Typical Applications:**

- PC board to chassis
- Thermally enhanced BGAs
- Memory packages & modules
- GPU & CPU

#### Order Information:

Thermally conductive pads are available in the following formats. Contact Chomerics for custom widths, part sizes, etc. Distributor sheets-Typically 10"×15", "X" means "G" or "F" or None 0.040 in=61-04-1015-TPS60X 0.060 in=61-06-1015-TPS60X 0.080 in=61-08-1015-TPS60X 0.100 in=61-10-1015-TPS60X 0.200 in=61-20-1015-TPS60X Custom thicknesses available upon request. For example, 0.020 in=61-02-1015-TPS60G







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Typical Properties	TPS60, TPS60G, TPS60F	Test Method
Color	Black	Visual
Specific Gravity	3.26	ASTM D792
Standard Thicknesses, mm(inch)	1.0-5.0 (0.04-0.200)	ASTM D374
Hardness, Shore OO	35	ASTM D2240
Stress-Deflection @different thickness	See Below Graph	ASTM C165 MOD (1.0 in <sup>2</sup> disc probe,0.025 in/min rate)
Operating Temperature Range, °C	-50-150	
Thermal Conductivity, W/m-K@20psi	7.5*	ASTM D5470
Thermal Impedance,(°C-in^2/w) @20psi, @2.5mm thickness	0.45	ASTM D5470
Heat Capacity, J/g-K	0.72	ASTM E1269
Coefficient of Thermal Expansion, ppm/K	N/A	ASTM E831
Dielectric Strength, KVac/mm (Vac /mil)	8.0 (200)	ASTM D149
Volume Resistivity, ohm-cm	1014	ASTM D257
Flammability Rating(See UL File E140244 for Details)(Internal Test)	V-0	V-0
RoHS Compliant	Yes	<b>Chomerics</b> Certification
Shelf Life, months from DOM	24	Chomerics

\*For TPS60 and TPS60F, the thermal conductivity is 7.5W/m-k. For TPS60G, the thermal conductivity is 6.5W/m-k.









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