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Flexible From -55 to 180°C

Puncture Resistant Pad

Will Not Melt-flow <175°C

>1500 V Insulation @ 3 mil

UL 94V-O Rating

**IDEAL FOR:**

- Thermal Grease Replacement
- Thermal Gasket Replacement
- High Voltage Insulation

**DESCRIPTION:**

CP7175 is an aluminum oxide crystallite filled, electrically insulating, thermal interface material with good dielectric insulation. It is designed to enhance thermal transfer from power device to heat-sink. CP7175 is dry and handles well with automated excise-placement equipment. It will not flow below 175°C and is suitable for use as thermal gasket.

**AVAILABILITY:**

CP7175 is available in sheet sizes, reel, and as custom preforms. Standard thickness is 0.003" and 0.006". Special thicknesses are available.

**APPLICATION PROCEDURES:**

- ( 1 ) Cut or pre-cut to desired size and shape.
- ( 2 ) Place COOL-PAD between device and heatspreader or heat-sink.
- ( 3 ) Clamp with 10 psi for optimum conformance.

**CAUTION:** This product may cause skin irritation. Avoid skin contact. If contact does occur, wash immediately with soap and water. Please refer SDS for more details. The information contained herein is believed to be reliable. All recommendations or suggestions are made without guarantee inasmuch as conditions and methods of commercial use are beyond our control. Properties given are typical values and not intended for use in preparing specifications. The user is advised to evaluate the product in the manner the product is to be used in manufacturing and in the final product. Under no circumstance shall AI Technology be liable for accidental, consequential or other damages arising from the use or handling of this product.

While AI Technology owns all proprietary rights of material formulations of its products, specific usage in the manufacturing of certain products may involve patent rights of other companies.

**COOL-PAD**  
**CP7175**

**TYPICAL PROPERTIES\***

Electrical Resistivity ( 25 °C/ As is )	>1x10 <sup>14</sup> ohm-cm
Dielectric Strength (Volts/mil)	>750
Glass Transition Temp.(°C)	-55 ±10%
Lap-Shear Strength	N/A
Device Push-off Strength	N/A
Hardness (Type)	<80 (A)
Cured Density (gm/cc)	2.0 ±10%
Thermal Conductivity	>12 Btu-in/hr-ft <sup>2</sup> -°F >1.8 W/m-°C
Linear Thermal Expansion Coeff. (ppm/°C)	60 ±15%
Maximum Continuous Operation Temp. (°C)	<180

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**Melt/Flow Conditions**

<u>Temperature</u>	<u>Time</u>	<u>Pressure</u>
>175°C (Nominal)	0.5sec Bond Force)	>10 psi

CP7175 is thermally stable for use up to 180°C and beyond. For continuous usage from 180-220°C, AIT recommends testing for qualification before usage.

**SHELF LIFE:**

<u>Storage temperature</u>	<u>Shelf Life</u>
25°C	1 yr