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COOL-PAD

CP7175

Flexible From -55 to180ºC
Puncture Resistant Pad
Will Not Melt-flow <175ºC
>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 175ºC and is suitable for use as thermal gasket.

TYPICAL PROPERTIES*

Electrical Resistivity (25 ºC/ As is)	**>1x10 ^{14} ohm-cm**
Dielectric Strength (Volts/mil)	**>750**
Glass Transition Temp.(ºC)	**-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-ft²-ºF** **>1.8 W/m-ºC**
Linear Thermal Expansion Coeff. (ppm/ºC)	**60 ±15%**
Maximum Continuous Operation Temp. (ºC)	**<180**

* 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 intended to be used in manufacturing and in the final product.

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.

Melt/Flow Conditions

Temperature	Time	Pressure
>175ºC (Nominal	0.5 sec Bond Force)	>10 psi

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

SHELF LIFE:

Storage temperature	Shelf Life
25ºC	1 yr

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.