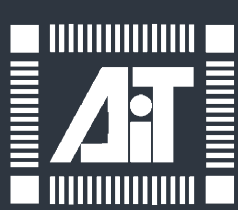


COOL-SILVER™ PAD

ELECTRICALLY NON-CONDUCTIVE, OUTSTANDING THERMAL CONDUCTIVITY

NON-CURING COMPRESSIBLE

Ideal for:

- Power chip to heat spreader interface
- Power module to heat sink interface

Availability:

- In sheet sizes, reel, and as custom preforms
- Standard thickness is:
  - 0.001”
  - 0.003”
  - 0.010”
  - 0.020”
  - 0.040”
- Special thickness are available

Usage Conditions:

- Temperature: Ambient
- Time: As is
- Pressure: > 5 psi

Shelf Life:

- Storage Temp.: 25 °C
- Shelf Life: 1 yr from ship date

Description

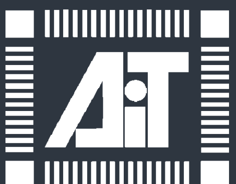
COOL-SILVER PAD is a micro-silver filled, non-electrically conductive, thermal interface material for thin and thick gap filling applications. It is slightly tacky and designed to have high compressibility and enhanced thermal transfer from power devices to heat-sink.

AIT’s COOL-SILVER PAD combines high compressibility and special melt-flowing characteristics at 55 °C to facilitate intimate thermal contact. The high compressibility coupled with outstanding thermal conductivity provides ultra low thermal interfacial resistance and meets UL94V-0 rating.

Typical Properties

PROPERTY/PARAMETER	VALUE
Electrical Resistivity	N/A
Dielectric Strength (Volts/mil)	N/A
Glass Transition Temp. (°C)	-60
Lap-Shear Strength	N/A
Device Push-off Strength	N/A
Hardness (Type)	< 50 (A)
Cured Density (gm/cc)	5.0
Thermal Conductivity	> 83 Btu-in/hr-ft²-°F > 12 W/m-°C
Linear Thermal Expansion Coeff. (ppm/°C)	100
Maximum Continuous Operation Temp. (°C)	> 150

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.



COOL-SILVER™ PAD

Electrically Non-Conductive, Outstanding Thermal Conductivity

Key Benefits:

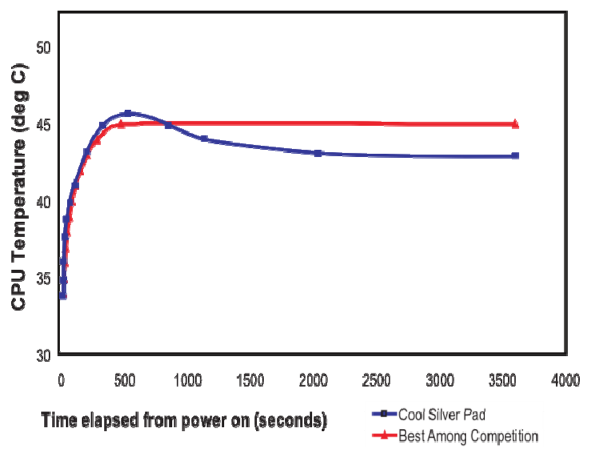
- Speed
- Simplicity
- Savings

About AI Technology, Inc.

Since pioneering the use of flexible epoxy technology for microelectronic packaging in 1985, AI Technology has been one of the leading forces in development of advanced material and adhesive solutions for electronic interconnection and packaging.

The company has an ISO9001:2000 certified manufacturing and R&D facility on a 16-acre campus in Princeton Junction, NJ. AIT has a full line of die and substrate attach films and pastes, thermal interface materials, (EMI/RFI) mitigation material solutions, conductive caulks and adhesives and advanced flexible and Insulated Metal Circuit Substrates.

Performance Graph



ULTIMATE THERMAL MANAGEMENT

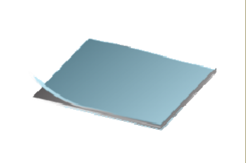
UNIFORM THICKNESS

EASY TO USE

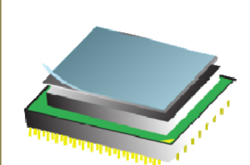
UNPARALLELED RELIABILITY

Application Procedure

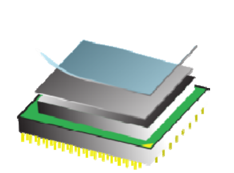
1 Carefully peel the release liner from one side



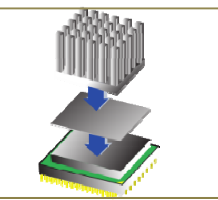
2 Gently apply the pad on the CPU surface starting from a corner



3 Peel the remaining release liner



4 Apply the heat sink and clamp it down. The patented (US 6,496,737) compressible phase change material will melt-flow and minimize the interfacial thermal resistance. In other words: YOUR MACHINE WILL ROCK!



Call AI Technology at 609-799-9388 for more information on this product and our full line of electronic processing and packaging materials!