



THEMALLY CONDUCTIVE

#### Ideal for:

- Thermal Grease Replacement
- Phase-Change Pad Replacement
- Thermal Pad Replacement

#### Availability:

COOL-GELFILM™ SZM is available in sheet sizes, reel and as custom preforms with release liners. Standard thickness is 0.0015", 0.003" and 0.006". Other thicknesses are available upon request.

#### Usage Conditions:

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

#### Shelf Life:

- 1 yr. in original sealed package
- Storage Temp.: 25 °C

#### Purchase AIT Products:

[www.aitmart.com](http://www.aitmart.com)

#### Request information about

AIT Products:

[info@aitmart.com](mailto:info@aitmart.com)

## Description

COOL-GELFILM™ SZM is a new class of thermal interface materials that dispenses in place like a film but has the performance and characteristics of a grease-gel. It is filled with modified oxide admixture crystallite, electrically insulating at normal voltage and is engineered for large area and gap filling interface applications. It is designed to have high compressibility and instant flow to enhance thermal transfer from power device to heat-sink. COOL-GELFILM™ SZM is slightly tacky on both sides for optimum instant thermal transfer performance and has a UL94V-0 rating.

## Typical Properties

PROPERTY/PARAMETER	VALUE
Electrical Resistivity (25°C / As is)	>1x10 <sup>14</sup> ohm-cm
Dielectric Strength (Volts/mil)	>550 V/layer
Glass Transition Temp. (°C)	-55
Lap-Shear Strength	N/A
Device Push-off Strength	N/A
Hardness (Type)	<20 (A)
Cured Density (gm/cc)	>2.5
Thermal Conductivity	>84 Btu-in/hr-ft <sup>2</sup> -°F >12.0 W/m-°C
Linear Thermal Expansion Coeff. (ppm/°C)	150
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.

## Application Procedure

1. Cut or pre-cut to desired size & shape.
2. Place COOL-GELFILM™ SZM between device & heat spreader or
3. Clamp with >5 psi for conformal & optimum thermal performance.