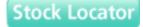
## Item # Tmate 2910, Tmate™ 2900 Series Phase Change Material



## Tmate<sup>™</sup> 2900 Series Phase Change Material



Tmate<sup>™</sup> 2900 is a reusable phase change material designed for ease of testing and rework ability. Tmate<sup>™</sup> 2900 has a composite construction of a special malleable metal alloy and a high performance phase change material.

At 50°C, Tmate<sup>™</sup> 2900 begins to soften and flow, filling the microscopic irregularities of the thermal solution, thus reducing thermal resistance.

Tmate <sup>™</sup> 2900 shows no thermal performance degradation after 1000 hours at 130°C, or after 500 cycles, from -25°C to 125°C. The phase change material softens and does not fully change state resulting in minimal migration (pump out) at operating temperatures. Tmate <sup>™</sup> 2900 is available in three thicknesses, 0.005 in. (0.125 mm), 0.010 in. (0.25 mm) and 0.020 in. (0.5 mm).

## **SPECIFICATIONS**

Construction and Composition	Foil coated on one side with phase change material
Color	Silver Yellow
Test Method - Color	Visual
Thickness	0.010 inches 0.254 mm
Thickness Tolerance	±0.001 inches ±0.025 mm
Density	1.64 g/cc
Shelf Life	1 year
Temperature Range	-25 to 125 °C
Phase Change Softening Range	50 to 70 °C
"Burn In" Temperature	70°C for 5 minutes
Thermal Resistance at 20 psi	0.180 °C-in <sup>2</sup> /W 1.160 °C-cm <sup>2</sup> /W
Test Method - Thermal Resistance	ASTM D5470 (modified)
Volume Resistivity	5 x 10 <sup>12</sup> ohm-cm
Test Method - Volume Resistivity	ASTM D257

Dielectric Constant at 1 MHz	4.20
Test Method - Dielectric Constant	ASTM D150
Sheet Size	9 x 9 inches