

PRODUCT DATA SHEET

# Soft Metal Alloy Thermal Interface Materials

## Introduction

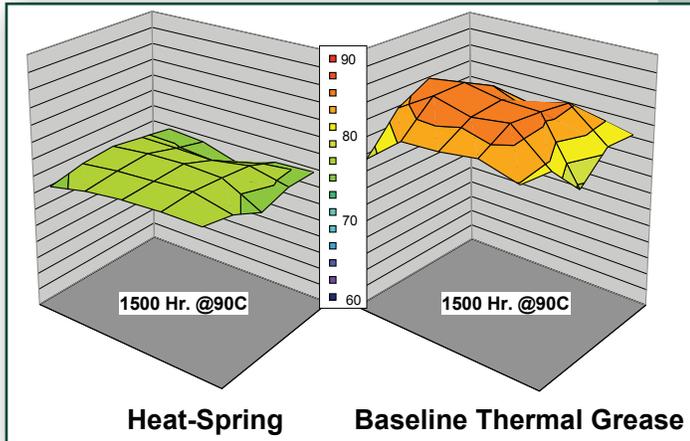
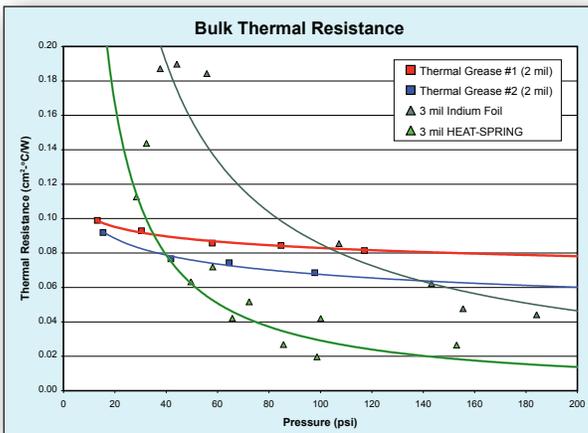
Indium's **Soft Metal Alloy Thermal Interface Materials (SMA-TIM)** exhibit superior thermal conductivity, compressibility and ease of application. SMA-TIM preforms constructed of indium with our heat-spring processing technology are a highly effective choice for high-end cooling devices.

## Specifications

Typical Dimensions	25.4mm x 25.4mm x .05-.3mm (1" x 1" x .002"-.012")
Application Pressure	>20psi
Alloy/Purity Level	In/99.99%
Max. Operational Temp.	140°C
Thermal Conductivity	86W/mK

## Compressed Interface Application

An SMA-TIM made of indium offers uniform thermal resistance at lower applied stresses in compressed interfaces. The malleability of indium minimizes surface resistance and increases heat flow. Our patent pending heat-spring technology will further reduce the thermal resistance.



## Reliability

Indium's line of high-end thermal interface materials delivers superior performance over time. As SMA-TIM products are made of metal, they do not experience pump out problems even under power cycling. The heat-spring material, which does not contain silicone, will conform to surface disparities over time, thereby reducing thermal resistance through the life of the TIM. Due to its solid state, the SMA-TIM also resists bake out as shown in the diagram above.

## Storage and Packaging

SMA-TIM Preforms come in a variety of packaging options, including tape and reel. To minimize excessive handling and oxidation due to exposure to air, SMA-TIM Preforms should be packed according to the quantity used during a typical work shift.

Store in the original container, closed securely, in 55%RH or less and at a temperatures less than 22°C. SMA-TIM Preforms can also be stored in an inert atmosphere such as a nitrogen air box. The SMA-TIM can also be packed in custom made individual adhesive carriers for direct attach to heat sinks and substrates.

## Safety Data Sheets

The SDS for this product can be found online at <http://www.indium.com/sds>

Also available: solder preforms, solder wire, solder ribbon and foil, solder paste, solder spheres, solder fluxes, solder ingot, and other solder fabrications.

This product data sheet is provided for general information only. It is not intended, and shall not be construed, to warrant or guarantee the performance of the products described which are sold subject exclusively to written warranties and limitations thereon included in product packaging and invoices. All Indium Corporation's products and solutions are designed to be commercially available unless specifically stated otherwise.

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