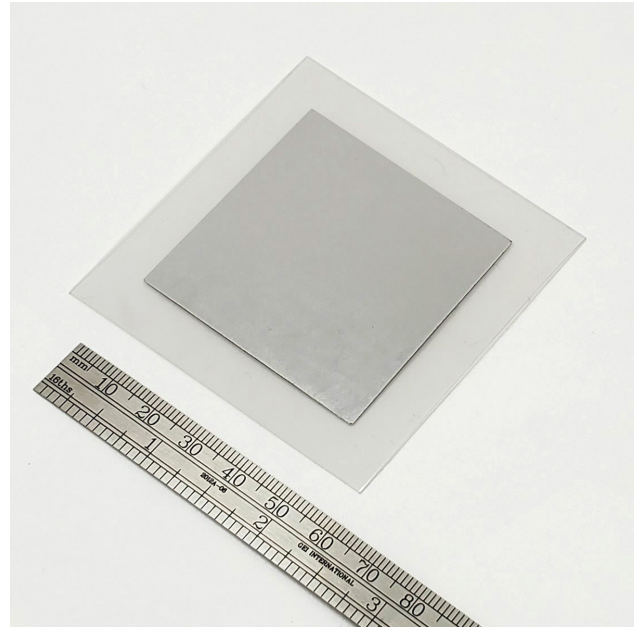


# Specification Sheet

Part #	Description
<b>TF-IF5050</b>	Pure Indium foil thermal interface material (TIM)

Material
99.995% Pure Indium

Dimensions					
Length		Width		Thickness	
mm	in	mm	in	mm	in
50.0	1.97	50.0	1.97	0.05	0.002



Indium is a unique metal with many unusual properties and uses;

- Used as a Thermal Interface Material (TIM) due to its very high thermal conductivity.
- Extremely reliable as a TIM since it has no “pump out” associated with many thermal compounds and greases.
- Soft and malleable; easily conforms to surfaces and curves.
- Remains malleable and fusible even at cryogenic temperatures. Used as a cryogenic sealant and gasket.
- Wets glass and most ceramics.
- Can be used as a lead free solder.
- Completely recyclable.

#### Application as a TIM:

1. Cut to required size with scissors or razor. Take care as the indium foil easily tears.
2. Apply by laying foil on intended surface and rubbing into place with gloved fingers.
3. Bring 2nd surface into contact with the indium foil and maintain compression with at least 10 psi and preferably 75-125 psi.

Properties	
Density	7310 kg/m <sup>3</sup>
Melting point	156.6°C [313.88°F]
Thermal conductivity	81.8 Watts/m-K @ 25°C
Specific heat	0.056 Cal/g/K @ 25°C
Thermal expansion	32.1 um/m/K @ 25°C
Electrical resistivity	8.37 microhm-cm @ 20°C
Heat of vaporization	53.7 K-Cal/gm atom at 2080 °C
Heat of fusion	0.781 Cal/gm mole
PubChem CID	5359967
CAS Number	7440-74-6