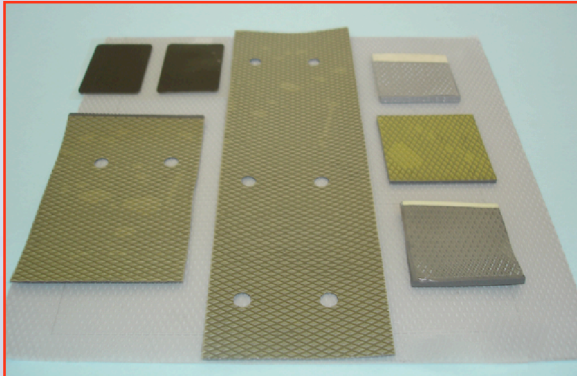


# TIM-GAP FILLERS

*Cool it Right*

**TIM-GAP FILLERS** are designed to meet industry's growing need for interface material with high conductivity and greater conformability for easier application. Gap fillers are used to fill air gaps between components or PC boards and heat sinks, metal enclosures and chassis. Ideal for application where large gap tolerances are present due to steps, rough surfaces, and high stack-up. Gap filler materials allow the designer to be less concerned with components proximity to heat sinks or heat spreaders



## TIM-GAP FILLERS

Highly Conformable, Thermally Conductive Gap Fillers

### Key Features

- High Thermal Conductivity up to 6 W/m<sup>2</sup> K
- High conformability to fill irregular surfaces
- Ideal for large gaps
- Reduce contact resistance
- Electrically Isolating
- Clean release from device/Re-workable
- Stress absorbing flexibility

PROPERTY	TEST METHOD	1101	1102	1103	1106
Type		Silicone	Silicone	Silicone	Silicone
Color	Visual	Gray	Gray	Gray	Gray
Thickness, mm		2.5	2.5	2.0	1.0
Density, g/cc	ASTM D792	2.6	2.5	2.6	3.3
Thermal Conductivity W/m <sup>2</sup> k	ASTM D5470 Modified	1.4	2.4	2.8	6.0
Thermal Resistance °Cin <sup>2</sup> /W	ASTM D5470 Modified	2.1	1.7	1.1	0.31
Volume Resistivity, ohm-cm	ASTM D257	10 <sup>14</sup>	10 <sup>14</sup>	10 <sup>12</sup>	10 <sup>14</sup>
Hardness Shore 00	ASTM D2240	48	48	54	54
Elongation %	ASTM D412	100	100	65	53
Compression 12 Kg/in <sup>2</sup> 10% sustained after 1 min. 50% sustained after 1 min.	Timtronics	7.8 27.5	4.3 26.5	6.5 41	10 50
Flame Retardancy		94VO	94VO	94VO	94VO
Available Thickness, mm		0.5 to 5.0	0.5 to 5.0	0.5 to 3.0	0.5 to 3.0

### Availability:

- **TIM-GAP FILLERS** are available in die-cut or sheet form with protective liners on both sides. The material is compatible with dispensing equipment for high volume production.
- Materials are available in thickness from 0.50mm to 5.0mm
- Materials are available with hardened top surface and fiber glass reinforcement for easy handling and installation during complex assemblies.

**Disclaimer:** All data given here is offered as a guide to the use of these materials and not as a guarantee of their performances. The user should evaluate their suitability for own purposes. Properties are typical and should not be used in preparing specifications. Statements are not be construed as recommendations to infringe any patent

### Applications

- CDROM Cooling
- RDRAM Memory Modules
- Heat Pipe Assembly
- Between CPU and Heat Spreader
- Compression jointing material for Thermistors and Temperature Sensors
- Heat transfer to chassis, or other type of heat spreader.