

ThermaCool® TC100U Gap Filler

ThermaCool® TC100U is an uncured (B-Stage) unsupported thermally conductive solid silicone rubber. This material offers thermal conductivity along with electrical isolation for heat transfer applications bonding PCBs and heat sinks. TC100U also acts as a stress relief interface when cured.

Features/Benefits

- Uniquely formulated to cure in place
- Can be repositioned prior to curing
- Uncured material can be die-cut

Typical Properties

Property	TC100U	Test Method
Colour	Light Blue	—
Available Thicknesses mm (in.)	0.64, 0.81, 1.58 (0.025, 0.032, 0.062)	ASTM D374
Thermal Conductivity W/m ² K ⁻¹	1.3	ASTM E1530
Thermal Impedance °C in. ² /W	1.25	ASTM E1530
Break Strength MPa (psi)	1.38 (200)	ASTM D412
Elongation %	350	ASTM D412
Hardness Shore A	65	ASTM D2240
Dielectric Strength volts/mil	450	ASTM D149
Operating Temperature °C	-62 to +204	—

Typical Cure Cycles

Temperature (°C)	Time (minutes)	Temperature (°C)	Time (minutes)
85	7 to 20	105	2.0 to 4.0
90	5 to 15	110	1.5 to 3.5
95	3 to 7	120	1.5 to 3.0

Applications—TC100U is used as an unsupported thermal transfer material in applications requiring clean release, enhanced thermal performance by filling air gaps and electrical isolation, for example:

- Electronic modules for power devices or power supplies
- Computers, telecommunications, automotive electronics
- Electrical insulation
- Heat pipe assemblies
- CD-ROM cooling

Availability—TC100U is available by the metre in rolls 457mm wide. Other thicknesses can be manufactured—please contact Saint-Gobain for minimum requirements.

Saint-Gobain Performance Plastics sales, fabrication and distribution facilities are situated at the following locations:

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AFF-1282E-PDF-0705-SGCS