

# TC Series

## Electrically Insulating Thermal Sheet

TC series is the high-performance thermally conductive electrically Isolating material reinforced with fiberglass, which has excellent cut through resistance and excellent thermal resistance. It can be used in electronic and electrical applications that require both thermal conductivity and electrical insulation.



### FEATURES / BENEFITS

- 1.6/2.0/3.5 /8.0 W/m.K
- High Cut-Through Resistance
- High Breakdown Voltage
- Low Thermal Resistance at Low Application Pressure

### TYPICAL APPLICATIONS

- Power Modules
- Fiber Optics
- Automotive Power Modules and EV Applications
- Motor Controls
- Semiconductors

Typical Properties					
Attribute	Value				Test Method
	TC900S	TC1500	TC2000	TC3000	-
Composition	Silicone + Fiberglass				
Color	Pink	Green	White	Light Blue	Visual
Density(g/cc)	2.5	2.8	1.52	1.55	ASTM D792
Thickness (mm)	0.23	0.25	0.25/0.38/0.5	0.23	ASTM D374
Hardness (Shore A)	85	85	87	90	ASTM D2240
Tear Strength (KN/m)	> 20	≥15	> 20	> 20	ASTM D412
Usage Temperature(°C)	-60 to 180	-40 to 150	-60 to 200	-60 to 180	-
Flammability	V-0	V-0	V-0	V-0	UL 94
Electrical					
Breakdown Voltage (kV)	> 5.5	≥5.0	> 3/4/5	> 3.6	ASTM D149
Volume Resistivity (Ω.cm)	10 <sup>14</sup>	10 <sup>13</sup>	10 <sup>14</sup>	10 <sup>14</sup>	ASTM D257
Thermal					
Thermal Conductivity(W/m.K)	1.6	2.0	3.5	8.0	ASTM D5470
Thermal Resistance (°C*in <sup>2</sup> /W)@50psi	< 0.61	< 0.56	< 0.24/0.27/0.36	< 0.19	ASTM D5470

