

# TCK Series

## Thermally Conductive Electrically Isolating Material

TCK series are the high-performance thermally conductive electrically Isolating material reinforced with PI film, 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

- High performance film
- Excellent electrical insulation properties
- Flammability UL 94 V-0
- Low thermal resistance

### TYPICAL APPLICATIONS

- Power Modules
- Heat generation power module
- Automotive Electronic Heat Modules
- Motor Control
- Power Semiconductor

Typical Properties			
Attribute	Value		Test Method
	TCK10	TCK15B	-
Composition	Silicone + PI film		
Color	Beige	Grey	Visual
Density(g/cc)	2.5	2.5	ASTM D792
Thickness (mm)	0.15	0.20	ASTM D374
Hardness (Shore A)	85	85	ASTM D2240
Tear Strength (KN/m)	> 25	≥10	ASTM D412
Usage Temperature(°C)	-60 to 180	-40 to 150	-
Flammability	V-0	V-0	UL 94
Electrical			
Breakdown Voltage (kV)	> 6.0	> 4.0	ASTM D149
Volume Resistivity (Ω.cm)	10 <sup>14</sup>	10 <sup>13</sup>	ASTM D257
Thermal			
Thermal Conductivity(W/m.K)	1.3	1.5	ASTM D5470
Thermal Resistance (°C*in <sup>2</sup> /W)@50psi	< 0.28	≤0.35	ASTM D5470

