

### Material Characteristics

Base Material	Thermal Expansion Coefficient (ppm/°K)	Thermal Conductivity (W/m-K)
TRICON® (6061 Aluminum)	23.5	175

### Performance Specifications

Maximum Operating Voltage		250 VAC
Maximum Operating Temperature		150°C
Conductor Adhesion – Initial (2mm X 2mm, 1.0mm solder wire)		> 2.0 kgf
Conductor Trace Resistivity		3 ~ 6 mohms /in <sup>2</sup>
Conductor Trace Resolution (line/space)		125µm / 125µm
Fired Conductor Thickness		12.5 ~ 15.0 µm
Breakdown Voltage	Pattern	> 400 V
	Insulation Layer	> 800 V
Available Insulation Layer Thickness		40 ~ 50 µm
Maximum Substrate Size		400mm X 400mm
Available Substrate Thickness (mm)		0.80, *1.60, 2.50, 5.00
Typical Properties		Bondable, SMD, Reflow, soldering
Manual Soldering Recommendation		Tip temperature 360°C ~ 420°C for 3s Max (1 time soldering)

Note: \*common thickness

### Conductor Reliability Test

	Pressure Cooker		Thermal Shock	
	Before	After	Before	After
Resistance (Ω)	0.0695	0.0685	0.0665	0.0890
Pull Force (kgf)	3.2~3.8	1.0~1.8	2.8~3.0	1.8~2.4
Pattern Breakdown voltage (volts)	425	410	401	408
Surface Breakdown voltage (volts)	807	905	758	784
Test Method	HMS test		Mil-Std-883 Method 1011 Condition C	
Test Conditions	Temp :121 °C, Humidity:100%RH Pressure :2atm Period :168hours		High Temp: +150 °C Low Temp : -65 °C Dwell time : 1hour Cycles : 250	

### Cover-coat Reliability Test

	White Coating		Black Coating	
	Before	After 48hrs	Before	After 48hrs
Breakdown Voltage (volts)	6047	4670	4400	2184
Appearance (Visual)	OK		OK	
Test Method	HMS Pressure Cooker test			
Test Conditions	- Temp : 121 °C - Pressure : 2atm		- Humidity : 100%RH - Period : 168hrs	