

TG-CPCB3-LI98-0.15

Ceramic PCB with thermally conductive adhesive tape

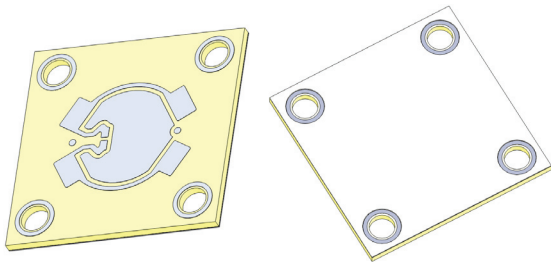


Features

- Patterned according to standard LED configurations
- Supplied with thermally conductive adhesive tape for ease of mounting
- Superior thermal management compared to FR4 and IMPCB
- Reduced cost of ownership
- Reduced manufacturing complexity

Applications

t-Global's range of ceramic circuit boards are designed for use with Philip's Luxeon range of LEDs. The correct patterning for these LEDs has been applied on the surface of each board for ease of manufacture.



TG-CPCB3 Properties

TG-CPCB2 Property	Functional Characteristics
Substrate	Al ₂ O ₃
Thermal Conductivity	24 W/m-k
Thickness	1.15mm
Metal Plate Stack Up	Cu 30 microns, Au 0.2 microns

Li-98 Properties

Property	Li-98	Unit	Test Method
Thickness	0.15	-	ASTM D374
Colour	White	-	Visual
Reinforcement carrier	Fibreglass mesh	-	-
Density	1.85	g/cm ³	ASTM D792
Tensile strength	200	psi	ASTM D412
Glass transition temperature	-30	°C	-
Short time use temperature (30sec)	200	°C	-
Continuous working temperature	-30 to 120	°C	-
Thermal conductivity	0.95	W/mK	ASTM D5470
Thermal impedance @ <1psi	1.0	C in 2/W	ASTM D5470
Thermal impedance @ 50psi	0.9	C in 2/W	ASTM D5470
Initial tack	11	cm	PSTC-6
Lap shear strength	61	N/cm ²	ASTM D1002
Die shear strength @ 25 °C	120	N/cm ²	-
Die shear strength @ 80 °C	69	N/cm ²	-
Holding power 1000g @ 25 °C using 1 in ²	>10000	min	PSTC-7
Holding power 1000g @ 80 °C using 1 in ²	>10000	min	PSTC-7
180° peeling strength (aluminium)	4	N/cm	ASTM D3330
Dielectric breakdown voltage (Vac)	>2	kV	ASTM D149
Dielectric breakdown voltage (Vdc)	>3	kV	ASTM D149