



# ST210G

(UL ANSI: CEM-3.1) Thermal Conductive, Halogen Free CEM-3

## FEATURES

- Good thermal conductivity
- High CTI
- Excellent mechanical process ability
- Halogen, antimony and red phosphorus free

## APPLICATIONS

- Power supplier
- Automotive electronics
- LED display and lighting

## GENERAL PROPERTIES

Test Items	Test Method	Test Condition	Unit	Typical Value
Thermal conductivity	ASTM5470	A	W/(m·K)	1.05
Tg	IPC-TM-650 2.4.25D	DSC	°C	122
Td	IPC-TM-650 2.4.24.6	TGA (5% W.L)	°C	360
T288	IPC-TM-650 2.4.24.1	TMA	min	10
T260	IPC-TM-650 2.4.24.1	TMA	min	60
Thermal Stress	IPC-TM-650 2.4.13.1	288°C, solder dip	s	>90
CTE (Z-axis)	IPC-TM-650 2.4.24	Before Tg	ppm/°C	28.9
	IPC-TM-650 2.4.24	After Tg	ppm/°C	260
	IPC-TM-650 2.4.24	50-260°C	%	3.5
Permittivity (1MHz)	IPC-TM-650 2.5.5.9	C-24/23/50	-	5.1
Loss Tangent (1MHz)	IPC-TM-650 2.5.5.9	C-24/23/50	-	0.013
Volume Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ·cm	8.9×10 <sup>8</sup>
Surface Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ	5.7×10 <sup>7</sup>
Arc Resistance	IPC-TM-650 2.5.1	D-48/50+D-0.5/23	s	160
Dielectric Breakdown	IPC-TM-650 2.5.6	D-48/50+D-0.5/23	kV	>45
Peel Strength (1oz)	IPC-TM-650 2.4.8	288°C/10s	N/mm [lb/in]	1.3 [7.14]
Flexural Strength (LW/CW)	IPC-TM-650 2.4.4	A	Mpa	380/240
Water Absorption	IPC-TM-650 2.6.2.1	D-24/23	%	0.12
Flammability	UL94	C-48/23/50	Rating	V-0
CTI	IEC60112	A	Rating	PLC 0 (≥600V)

- Remarks:
1. Specification sheet: IPC-4101/35, is for your reference only.
  2. All the typical value is based on the 1.6mm specimen.
  3. All the typical value listed above is for your reference only, please turn to Shengyi Technology Co., Ltd for detailed information, and all rights from this data sheet are reserved by Shengyi Technology Co., Ltd.

## PURCHASING INFORMATION

Thickness	Copper foil	Standard size	
0.63mm to 3.2mm	18um to 105 um	915mm ×1,220mm(36"×48")	1,020mm ×1,220mm(40"×48")
		1,070mm ×1,220mm(42"×48")	

Remarks: Other sheet size and thickness could be available upon request.