

UL Recognised flame retardant CEM-3 copper clad composite laminate offering excellent electrical performance along with good punching characteristics

Characteristics	Flame Retardant, Excellent electrical and punching properties
Colours	Translucent, Cream or Grey
Thickness	1.5 mm to 3.2mm
Copper	18 µm, 35 µm or 70 µm
Sheet Size	1220 mm x 1060 mm (panel sizes cut on request)

	<i>units</i>	<i>test method</i>
<b>GENERAL PROPERTIES</b>		
Relative Density	1.9 g/cm <sup>3</sup>	
Temperature Rating	130 (Class B) °C	
Flammability	V-0 -	UL-94
Water Absorption	0.15 % (1.6 mm)	IPC-TM-650 2.6.2.1
Glass Transition Temperature	115 °C	IPC-TM-650 2.4.25
<b>MECHANICAL PROPERTIES</b>		
Flexural Strength	275 MPa (1.6 mm)	IPC-TM-650 2.4.4
Copper Peel Strength	1.8 N/mm (35 µm)	IPC-TM-650 2.4.8
Solder dip at 260°C	> 30 s	
<b>ELECTRICAL PROPERTIES</b>		
Volume Resistivity C-96/35/90	10 <sup>6</sup> MΩcm	IPC-TM-650 2.5.17.1
Surface Resistivity C-96/35/90	2 x 10 <sup>6</sup> MΩ	IPC-TM-650 2.5.17.1
Dielectric Breakdown	50 kV	IPC-TM-650 2.5.6
Dissipation Factor at 1 MHz	0.022 -	IPC-TM-650 2.5.5.3
Permittivity at 1 MHz	4.2 -	IPC-TM-650 2.5.5.3
Comparative Tracking Index	> 200 V	IEC 112/DIN 53480 Kc

## CONDITIONING

C-96/35/90 – 90% Relative Humidity @ 35°C for 90 hours

## SPECIFICATION COMPLIANCE

NEMA LI-1 CEM-3; IPC-4101/12

## ENVIRONMENTAL COMPLIANCE

RoHS compliant; REACH compliant

## QUALITY SYSTEM APPROVAL

Certified NSAI to I.S.ENISO 9001:2008

## PRODUCT APPROVAL

Recognised by Underwriters Laboratories file ref. E53727