

# **CG-10**

### MICROELECTRONIC BASE MATERIALS

MICAM's CG-10 is an excellent mechanical and electrical epoxide copper clad laminate

Characteristics	Excellent electrical, mechanical properties, low halogen content		
Colours	Natural, Green, Blue & Black		
Thickness	0.1 mm to 0.8 mm		
Copper	18 μm, 35 μm or 70 μm (other copper thickness available)		
Sheet Size	2440mm x 1220mm, 1220mm x 920mm (panel sizes cut on request)		

		units	test method
GENERAL PROPERTIES			
Relative Density	1.8	g/cm³	
Temperature Rating	130 (Class B)	°C	
Water Absorption	0.6	% (<0.78 mm)	IPC-TM-650 2.6.2.1
Glass Transition Temperature	115	°C	IPC-TM-650 2.4.25
MECHANICAL PROPERTIES			
Flexural Strength Lengthwise	470	MPa (1.6 mm)	IPC-TM-650 2.4.4
Flexural Strength Crosswise	400	MPa (1.6 mm)	IPC-TM-650 2.4.4
Thermal Stress – 10 secs @ 288°C unetched		Pass/Visual	IPC-TM-650 2.4.13.1
Thermal Stress – 10 secs @ 288°C etched		Pass/Visual	IPC-TM-650 2.4.13.1
Copper Peel Strength	1.9	N/mm (18 µm)	IPC-TM-650 2.4.8
Solder dip at 260°C	> 30	S	
ELECTRICAL PROPERTIES			
Volume Resistivity C-96/35/90	10 <sup>8</sup>	MΩcm (0.5 mm)	IPC-TM-650 2.5.17.1
Surface Restivity C-96/35/90	106	MΩ (0.5 mm)	IPC-TM-650 2.5.17.1
Dielectric Breakdown	>50	kV (1.6 mm)	IPC-TM-650 2.5.6
Loss Tangent at 1 MHz	0.028	-	IPC-TM-650 2.5.5.3
Permittivity at 1 MHz	4.8	-	IPC-TM-650 2.5.5.3

#### CONDITIONING

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

## SPECIFICATION COMPLIANCE

IPC-4101/20; NEMA LI-1 G-10

# **ENVIRONMENTAL COMPLIANCE**

RoHS compliant; REACH compliant; Low Halogen content

## QUALITY SYSTEM APPROVAL

Certified by NSAI to I.S. ENISO 9001:2015 Reg. No. IE-19.0675.







