



## Technical data

# Glass fibre sheets

## Unlaminated base material

### Description

- DICY-cured epoxy resin system according to IPC4101
- $T_g \geq 135 \text{ °C}$
- Suitable for high mechanical and electrical applications
- Optionally with UV blocker, in yellow or natural green
- Complies with UL94 V-0 and RoHS

Properties	Test conditions	Unit	Specification	Typical values	
T <sub>g</sub>	DSC	°C	≥ 110	135	
Flammability	C-48/23/50	-	94V-0	94V-0	
	E-24/125+des				
Contact resistance	after moisture storage	MΩ-cm	≥ 10 <sup>3</sup>	10 <sup>6</sup>	
	E-24/125		≥ 10 <sup>3</sup>	10 <sup>5</sup>	
Surface resistance	after moisture storage	MΩ-cm	≥ 10 <sup>3</sup>	10 <sup>6</sup>	
	E-24/125		≥ 10 <sup>3</sup>	10 <sup>5</sup>	
Arc resistance	ASTM - D495 D-48/50+D-0,5/23	S	≥ 60	80	
Dielectric strength	D-48/50+D-0,5/23	KV/mm	≥ 40	55	
rel. Dielectric constant (1MHz)	C-24/23/50	ε <sub>r</sub>	≤ 5,4	4,5	
Dissipation factor (1MHz)	C-24/23/50	tan δ	≤ 0,035	0,021	
Thermal load	unetched	288 °C, 10 s	≥ 10 s no delamination	≥ 10 s no delamination	
	etched				
Flexural strength	lengthwise to the layer	A	MPa	≥ 415	550
	across the layer			≥ 345	435
Moisture absorption	D24/23	%	≤ 0,35	0,20	
CTE TMA Z-axis	before T <sub>g</sub>	TMA	μm/m °C	-	70
	after T <sub>g</sub>	TMA	μm/m °C	-	280
CTI	IEC60112 method	V	175-250 (III)	175	

Thickness of the pattern: 1.6 mm

Description: C: treatment with humidity, D: immersion in distilled water, E: heat treatment.

The numbers following the letters indicate with the first counter the duration of the pre-treatment in hours, with the second counter the temperature in °C, and with the third counter the relative humidity.

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