

CEM1 EP105/LM

COMPOSITION AND PRESENTATION

This kind of product is E-fiberglass woven fabric/non-woven modified epoxy resin fabric core. It has the surface material of epoxy resin fiberglass fabric and core material of modified epoxy resin fiber core.

Features:

- Excellent heat resistance
- Excellent punching property, suitable for punching at 45°C – 70°C
- IPC-4104 specification is applicable
- Plated through holes are not recommended for the cellulose core because it is easily attacked by the electrolyte

General Properties

Test Item	Unit	Test Conditions	Test Method IPC-TM-650	Specification	Typical Value
Peel Strength	N/mm	2.4.8	125°C	--	1.65
			260°C/10 sec	≥1.2	1.6/1.45
Thermal Stress	Sec	2.4.13.1	288°C/unetched	≥10	20
Bow/Twist	mm	A	2.4.22.1	1.6-0.14	1.51/1.55
				1.6+0.14	
Flexural Strength	N/mm	125°C	2.4.8	≥1.2	1.7/1.8
Flammability	Rating	UL94	UL94	UL94 V-0	V-0
Volume Resistivity	MΩ-m	C-96/35/90	2.5.17.1	≥5000	6000
Surface Resistivity	MΩ	C-96/35/90	2.5.17.1	≥3*10 ⁴	35000
Arc Resistance	Sec	D-48/50+D-0.5/23	2.5.1	≥60	125
Z-Axis Expansion	ppm/c	E-2/105 TMA	2.4.24	--	100/320
	%				6.0
Dielectric Constant (1MHz)	--	2.5.5.2	Etched at 1 Mhz	≤5.4	4.6
Dissipation Factor (1Mhz)	--	2.5.5.2	Etched at 1 Mhz	≤0.035	0.023
Water Absorption	%	D-24/23	2.6.2.1	≤0,5	0,25
Comparative Tracking Index	V	Etched/0.1%NH4CL	IEC60112	≥175	175/300/600

Note: All typical value is based on the 1.6 mm 1/0 specimen for your reference only.

A= Keep the specimen originally without any process C=Temperature and humidity conditioning

D=Immersion in distilled water with temperature control E= Temperature conditioning

The above data and fabrication guide provides designers and PCB-shops with references. We believe that this information is accurate, however the data may vary depending on test methods and specifications used.

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