

TECHNICAL INFORMATION

KB-7150

KB-7150 is composite epoxy resin, glass mat & glass fabric based copper clad laminate which could replace FR-4 to meet the requirement in processing single/double side printed circuit board. CEM-3 has good performance in punching, reliability of PTH (plated through hole) and resistance to moisture and heat.

Type	Grade	Construction
KB-7150	ANSI (NEMA) CEM-3	Glass fabric, Non-woven glass, Copper foil, Epoxy resin, Inorganic filler

Features

- **Excellent performance in punching**
Drilling and punching can be applied expediently with enhanced processing efficiency. The drill bit is lasting 2~5times during drilling process comparing to FR-4.
- **Excellent reliability of PTH**
There is good dimensional stability in thickness of board and good resistance of thermal stress of PTH.
- **Excellent heat and moisture resistance**
PCT test shows that there is no “Measling” occur after treated in water vapour for 7 hours at 130°C, then treated in solder float for 30 seconds at 288°C.

Standard Configuration

- **Thickness** : 0.8mm – 1.6mm (IPC-4101 Class B)
- **Copper Cladding** : 18μm, 35μm , 70μm
- **Regular Size (mm)** : 914 x 1220, 1020 x 1220, 1041 x 1245, 1067 x 1220
- **Other Size** : As specified by customers

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General Properties

Properties	Unit	Test Condition	IPC-4101 Testing Method	IPC-4101 Requirement	Typical Value
Flexural Strength	Kg/m ²	Lengthwise Crosswise	2.4.4	above 2.23 x 10 ⁷ above 1.90 x 10 ⁷	3.12 x 10 ⁷ 2.64 x 10 ⁷
Peel Strength (1 oz)	Kg/cm	A	2.4.8	above 1.43	2.0
Flammability	Sec	E24 / 23	2.3.10	Average Burn <= 5 Max Burn <= 10	2.5 7.0
Thermal Stress	Sec	Float 288 °C	2.4.13.1	above 20	above 30
Surface Resistance	MΩ	C96/35/90	2.5.17.1	above 1.0 x 10 ⁴	1.0 x 10 ⁶
Volume Resistivity	MΩ-cm	C96/35/90	2.5.17.1	above 1.0 x 10 ⁶	1.0 x 10 ⁹
Permittivity	—	Etched/@1MHZ	2.5.5.3	less than 5.4	4.8
Loss Tangent	—	Etched/@1MHZ	2.5.5.3	less than 0.035	0.02
Moisture Absorption	%	D24/23	2.6.2.1	less than 0.5	0.15

Remarks: Typical values for reference only.