

ITEQ
Your Partner of Advanced Materials & Mass Lam Service

IT-150G

CCL : IT-150GTC
Prepreg: IT-150GBS

Halogen Free Multifunctional Epoxy Resin and Lead Free Laminate & Prepreg

- ANSI Type : **FR-4.1**
- Applicable IPC-4101 /127/128；IPC-4103 /250/550
- Halogen Free , Middle Tg and high thermal reliability / Lead-Free Assembly Compatible
- Friendly Processing and CAF Resistance / For low cost HDI process applications

Laminate properties

Items	IPC TM-650	Typical Value	Unit
Peel Strength Standard profile copper foil(35um)	2.4.8	6.0	lb/inch
Volume Resistivity	2.5.17.1	10^{10}	MΩ-cm
Surface Resistivity	2.5.17.1	10^{10}	MΩ
Moisture Absorption	2.6.2.1	0.12	%
Permittivity (Dk, 75% resin content) A. 1GHz B. 2GHz C. 5GHz D. 10GHz	 2.5.5.9 2.5.5.13 2.5.5.13 2.5.5.13	 3.7 3.6 3.5 3.5	--
Loss Tangent (Df, 75% resin content) A. 1GHz B. 2GHz C. 5GHz D. 10GHz	 2.5.5.9 2.5.5.13 2.5.5.13 2.5.5.13	 0.0137 0.0140 0.0145 0.0148	--
Flexural Strength A. Length direction B. Cross direction	2.4.4	 470-500 400-430	N/mm^2
Young's Modulus A. Warp direction B. Fill direction	ASTM D3039	 19 18	Gpa
Thermal Stress 10 s at 288℃ A. Unetched B. Etched	2.4.13.1	 Pass Pass	Rating
Flammability	UL94	V-0	Rating
Comparative Tracking Index (CTI)	ASTM D3638 / UL 746	CTI 3 (175-249)	Class (Volts)
Maximum Operating Temperature(MOT)	UL 746	130	℃
Glass Transition Temperature(DSC)	2.4.25	150	℃
Decomposition Temperature(5% W.L)	2.4.24.6	365	℃
X/Y Axis CTE (40℃ to 125℃)	2.4.41	11/12	ppm/℃
	2.4.24.5	12/12	ppm/℃
Z-Axis CTE A. Alpha 1 B. Alpha 2 C. 50 to 260 Degrees C	2.4.24	 35 230 3.1	 ppm/℃ ppm/℃ %
Thermal Resistance A. T260 B. T288	2.4.24.1	 >60 >60	 Minutes Minutes