

ITEQ
Your Partner of Advanced Materials & Mass Lam Service

IT-601G

CCL : IT-601GTC
Prepreg: IT-601GBS

Low CTE and Low Df , Halogen Free , High Tg Material

- ANSI Type :**No ANSI**
- Appliceable IPC-4101 /127/128/130；IPC-4103 /240/540
- Low CTE in X/Y/Z -axis for excellent thermal performance
- Low Df for excellent electrical performance
- For HDI, Smart Phone, Memory Module, SSD, SiP, DRAM , Nand Flash Applications
- For High Speed Server , NB , Networking and Telecom & Automotive HDI application

Laminate properties

Items	IPC TM-650	Typical Value	Unit
Peel Strength, minimum A. Low profile copper foil (RTF Hoz) B. Low profile copper foil (RTF2 Hoz) C. Standard profile copper foil (HTE Hoz)	2.4.8	 5 ~ 6 4 ~ 5 6 ~ 7	lb/inch
Volume Resistivity	2.5.17.1	>1x10^{10}	MΩ-cm
Surface Resistivity	2.5.17.1	>1x10^{9}	MΩ
Moisture Absorption, maximum	2.6.2.1	0.10	%
Permittivity (Dk, 70% resin content) A. 1 GHz / B. 10 GHz	2.5.5.9 / 2.5.5.13	3.5 / 3.28	--
Loss Tangent (Df, 70% resin content) A. 1 GHz / B. 10 GHz	2.5.5.9 / 2.5.5.13	0.0055 / 0.0064	--
Flexural Modulus A. Warp B. Fill	2.4.4	 24-26 23-25	GPa
Thermal Stress 10s at 288°C A. Unetched B. Etched	2.4.13.1	 Pass Pass	Rating
Flammability	UL94	V-0	Rating
Comparative Tracking Index (CTI)	ASTM D3638/UL746	CTI 2 (250-399)	Class (Volts)
Maximum Operating Temperature (MOT)	UL 746	130	˚C
Glass Transition Temperature (DMA) Glass Transition Temperature (TMA)	2.4.24.4 2.4.24	230 210	℃
Decomposition Temperature (5% W.L)	2.4.24.6	420	℃
X/Y Axis CTE (<Tg,TMA)	2.4.41	9 / 10	ppm/℃
Z-Axis CTE A. Alpha 1 (α1) /B. Alpha 2 (α2) C. 50 ~ 260℃	2.4.24	 20-30/120~140 1.1	 ppm/℃/ppm/℃ %
Thermal Resistance A. T260 / B. T288	2.4.24.1	 >60 / >60	 Minutes