

ITEQ
Your Partner of Advanced Materials & Mass Lam Service

IT-858GTC

High Tg / Halogen Free / Low CTE /High Reliability Laminate & Prepreg

- Excellent CAF resistance (1000 Volts) & good through-hole reliability
- Very Low CTE and high thermal reliability / For automotive ECU, HDI, and heavy copper applications
- Advanced material with High Tg (200℃ by DSC), Low CTE (50-260℃: 1.4%) multifunctional filled epoxy resin and excellent thermal reliability.

Laminate properties

Items	IPC TM-650	Typical Value	Unit
Peel Strength Low profile copper foil	2.4.8	7.5	lb/inch
Volume Resistivity	2.5.17.1	10^9	MΩ-cm
Surface Resistivity	2.5.17.1	10^8	MΩ
Moisture Absorption	2.6.2.1	0.12	%
Permittivity (Dk, 50% resin content) A. 1GHz B. 2GHz C. 5GHz D. 10GHz	 2.5.5.09 2.5.5.13 2.5.5.13 2.5.5.13	 4.90 4.85 4.72 4.67	--
Loss Tangent (Df, 50% resin content) A. 1GHz B. 2GHz C. 5GHz D. 10GHz	 2.5.5.09 2.5.5.13 2.5.5.13 2.5.5.13	 0.0122 0.0128 0.0135 0.0140	--
Flexural Strength A. Length direction B. Cross direction	2.4.4	 500-530 440-470	N/mm^2
Thermal Stress 10 s at 288°C A. Unetched B. Etched	2.4.13.1	 Pass Pass	Rating
Flammability	UL94	V-0	Rating
Comparative Tracking Index (CTI)	IEC 60112 / UL 746	CTI 2 (250-399)	Class (Volts)
Maximum Operating Temperature(MOT)	UL 746B	150	˚C
Glass Transition Temperature(DSC)	2.4.25	200	˚C
Decomposition Temperature(5% W.L)	2.4.24.6	395	˚C
X/Y Axis CTE (40°C to 125°C)	2.4.24	11/12	ppm/˚C
Z-Axis CTE A. Alpha 1 B. Alpha 2 C. 50 to 260 Degrees C	2.4.24	 35 160 1.4	 ppm/˚C ppm/˚C %
Thermal Resistance A. T260 / B. T288	2.4.24.1	 >60 >60	Minutes
Dielectric Strength	2.5.6.2	0.85	kV/mil