



# IT-858GTC

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

- Excellent CAF resistance (1000 Volts) and good through-hole reliability
- Very Low CTE and high thermal reliability  
Advanced material with High Tg (200°C by DSC), Low CTE (50-260°C : 1.4%) multifunctional filled epoxy resin and excellent thermal reliability.

- For automotive ECU, HDI, and heavy copper applications

## 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 <sup>9</sup>	MΩ-cm
Surface Resistivity	2.5.17.1	10 <sup>8</sup>	MΩ
Moisture Absorption	2.6.2.1	0.12	%
Permittivity (Dk, 50% resin content) A. 1GHz B. 2GHz C. 5GHz D. 10GHz	2.5.5.13	4.90 4.85 4.72 4.67	--
Loss Tangent (Df, 50% resin content) A. 1GHz B. 2GHz C. 5GHz D. 10GHz	2.5.5.13	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 <sup>2</sup>
Thermal Stress 10 s at 288°C A. Unetched B. Etched	2.4.13.1	Pass Pass	Rating
Flammability	UL94	V-0	Rating
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 Minutes
Dielectric Strength	2.5.6.2	0.85	kV/mil
Comparative Tracking Index (CTI)	ASTM D3638	2 / 250-399	PLC / Volts

\*The sample thickness : 0.76mm.