



IT-988G SE

High Tg / Halogen Free / Lead Free / Ultra Low Loss Laminate & Prepreg

- 56Gbps per channel / NRZ & PAM 4
- Advanced Resin Technology
- Low Dk (< 3.24) & Ultra Low Df (< 0.0014) @ 10 GHz
- Very Stable Dk – Df across Frequency
- Excellent Insulation & CAF Resistance

Laminate properties

Items	IPC TM-650	Typical Value	Unit
Peel Strength, minimum A. 0.5 oz Very low copper roughness	2.4.8	3.50	PLI
Volume Resistivity	2.5.17.1	4.0 x 10 ¹⁶	MΩ-cm
Surface Resistivity	2.5.17.1	1.37 x 10 ¹²	MΩ
Moisture Absorption, maximum	2.6.2.1	0.26	%
Permittivity (Dk, 53% resin content) A. 1 GHz / 2 GHz B. 5 GHz / 10 GHz C. 15 GHz / 20 GHz	2.5.5.13	3.24 / 3.24 3.24 / 3.24 3.24 / 3.24	--
Loss Tangent (Df, 53% resin content) A. 1 GHz / 2 GHz B. 5 GHz / 10 GHz C. 15 GHz / 20 GHz	2.5.5.13	0.0013 / 0.0014 0.0014 / 0.0014 0.0014 / 0.0014	--
Flexural Strength, minimum A. Length direction B. Cross direction	2.4.4	TBD TBD	N/mm ²
Thermal Stress 10 s at 288°C Un-etched / Etched	2.4.13.1	Pass / Pass	Rating
Flammability	UL94	TBD	Rating
Glass Transition Temperature (Tg) A. TMA / DSC / DMA	2.4.25	190 / 190 / 205	°C
Decomposition Temperature	2.4.24.6	405	°C
X/Y Axis CTE (40°C to 125°C)	2.4.24	15/16	ppm/°C
Z-Axis CTE A. Alpha 1 & 2 B. 50 to 260 Degrees C	2.4.24	58 / 325 2.95	ppm/°C %
Thermal Resistance A. T288 B. T300	2.4.24.1	> 120 > 120	Minutes Minutes
UL CTI		Under testing	
UL MOT (Maximum operating temperature)		Under Testing	
Thermal conductivity		Under Testing	
IPC Slash sheet	4101	TBD	

