



# IT-968G

*High Tg/ Halogen Free/ Ultra low loss Laminate & Prepreg*

- 100G/400G Switch solution
- Lower Dk (3.59 @ 10GHz) and Ultra low Df (0.005 @ 10GHz)
- Stable Dk/Df with different environment condition
- Advanced High Tg Resin Technology

## Laminate properties

Items	IPC TM-650	Typical Value	Unit
Peel Strength A. Reverse treated copper foil (35μm) B. Very Low profile copper foil (35μm)	2.4.8	4.5 3.5	lb/inch
Volume Resistivity	2.5.17.1	10 <sup>10</sup>	MΩ-cm
Surface Resistivity	2.5.17.1	10 <sup>9</sup>	MΩ
Moisture Absorption	2.6.2.1	0.15	%
Permittivity (Dk, 55% resin content) A. 1GHz B. 2GHz C. 5GHz D. 10 GHz	2.5.5.13	3.78 3.68 3.60 3.59	--
Loss Tangent (Df, 55% resin content) A. 1GHz B. 2GHz C. 5GHz D. 10 GHz	2.5.5.13	0.0034 0.0038 0.0042 0.0050	--
Flexural Strength A. Length direction B. Cross direction	2.4.4	415 355	N/mm <sup>2</sup>
Thermal Stress 10 s at 288°C A. Unetched B. Etched	2.4.13.1	Pass Visual Pass Visual	Rating
Flammability	UL94	V-0	Rating
Comparative Tracking Index (CTI)	IEC 60112 / UL 746	CTI 2 (250-399)	Class (Volts)
Glass Transition Temperature(TMA)	2.4.25	175	°C
Decomposition Temperature	2.4.24.6	400	°C
X/Y Axis CTE (40°C to 125°C)	2.4.41	12/14	ppm/°C
Z-Axis CTE A. Alpha 1 B. Alpha 2 C. 50 to 260 Degrees C	2.4.24	45 260 2.3	ppm/°C ppm/°C %
Thermal Resistance A. T260 B. T288	2.4.24.1	> 60 > 60	Minutes Minutes

\*The sample thickness : 0.76mm.