



# IT-958G

*High Tg / Halogen Free / Very Low Loss Laminate & Prepreg*

- Advanced High Tg Resin Technology
- Excellent electrical performance
- Lower Dk (<3.8 @ 10GHz) and low Df (<0.007 @ 10GHz)
- Stable Dk/Df with different environment

## Laminate properties

Items	IPC TM-650	Typical Value	Unit
Peel Strength, minimum			
A. Low profile copper foil	2.4.8	3.5~4.2	lb/inch
B. Standard profile copper foil		7.0~8.0	
Volume Resistivity	2.5.17.1	> 10 <sup>10</sup>	MΩ-cm
Surface Resistivity	2.5.17.1	> 10 <sup>10</sup>	MΩ
Moisture Absorption, maximum	2.6.2.1	< 0.08	%
Permittivity (Dk, 50% resin content)			
A. 1GHz		3.85	
B. 2GHz	2.5.5.13	3.80	--
C. 5GHz		3.74	
D. 10GHz		3.70	
Loss Tangent (Df, 50% resin content)			
A. 1GHz		0.0054	
B. 2GHz	2.5.5.13	0.0057	--
C. 5GHz		0.0062	
D. 10GHz		0.0070	
Flexural Strength, minimum			
A. Length direction	2.4.4	480-510	N/mm <sup>2</sup>
B. Cross direction		400-430	
Thermal Stress 10 s at 288°C			
A. Unetched	2.4.13.1	Pass	Rating
B. Etched		Pass	
Flammability	UL94	N/A	Rating
Glass Transition Temperature(DSC)	2.4.25	175	°C
Decomposition Temperature	2.4.24.6	400	°C
X/Y Axis CTE (40°C to 125°C)	2.4.24	12/14	ppm/°C
Z-Axis CTE			
A. Alpha 1		40	ppm/°C
B. Alpha 2	2.4.24	230	ppm/°C
C. 50 to 260 Degrees C		2.5	%
Thermal Resistance			
A. T260	2.4.24.1	>60	Minutes
B. T288		>60	Minutes