



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)	2.4.8	4.5	lb/inch
B. Very Low profile copper foil (35μm)		3.5	
Volume Resistivity	2.5.17.1	10 ¹⁰	MΩ-cm
Surface Resistivity	2.5.17.1	10 ⁹	MΩ
Moisture Absorption	2.6.2.1	0.15	%
Permittivity (Dk)		(RC55%/RC70%)	
A. 1GHz	2.5.5.09	3.76/3.38	--
B. 2GHz	2.5.5.13	3.68/3.32	
C. 5GHz	2.5.5.13	3.60/3.30	
D. 10 GHz	2.5.5.13	3.59/3.26	
Loss Tangent (Df)		(RC55%/RC70%)	
A. 1GHz	2.5.5.09	0.0034/0.0031	--
B. 2GHz	2.5.5.13	0.0038/0.0031	
C. 5GHz	2.5.5.13	0.0042/0.0035	
D. 10 GHz	2.5.5.13	0.0050/0.0039	
Flexural Strength			
A. Length direction	2.4.4	415	N/mm ²
B. Cross direction		355	
Thermal Stress 10 s at 288°C			
A. Unetched	2.4.13.1	Pass Visual	Rating
B. Etched		Pass Visual	
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	130	°C
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	2.4.24	45	ppm/°C
B. Alpha 2		260	ppm/°C
C. 50 to 260 Degrees C		2.3	%
Thermal Resistance			
A. T260	2.4.24.1	> 60	Minutes
B. T288		> 60	Minutes