



IT-968 SE

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

- 100G/400G Switch solution
- Lower Dk (<3.3 @ 10GHz) and Ultra low Df (<0.004 @ 10GHz)
- Stable Dk/Df with different environment
- Advanced High Tg Resin Technology

Laminate properties

Items	IPC TM-650	Typical Value	Unit
Peel Strength, minimum A. Low profile copper foil	2.4.8	2.5-3.5	lb/inch
Volume Resistivity	2.5.17.1	> 10 ¹⁰	MΩ-cm
Surface Resistivity	2.5.17.1	> 10 ¹⁰	MΩ
Moisture Absorption, maximum	2.6.2.1	0.1	%
Permittivity (Dk, 50% resin content) A. 1GHz B. 2GHz C. 5GHz D. 10GHz	2.5.5.13	3.32 3.22 3.16 3.16	--
Loss Tangent (Df, 50% resin content) A. 1GHz B. 2GHz C. 5GHz D. 10GHz	2.5.5.13	0.0029 0.0031 0.0033 0.0037	--
Flexural Strength, minimum A. Length direction B. Cross direction	2.4.4	420-460 400-430	N/mm ²
Thermal Stress 10 s at 288°C A. Unetched B. Etched	2.4.13.1	Pass Pass	Rating
Flammability	UL94	N/A	Rating
Glass Transition Temperature(TMA)	2.4.25	190	°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 B. Alpha 2 C. 50 to 260 Degrees C	2.4.24	45 260 2.2	ppm/°C ppm/°C %
Thermal Resistance A. T260 B. T288	2.4.24.1	>60 >60	Minutes Minutes