

ITEQ
Your Partner of Advanced Materials & Mass Lam Service

IT-968GSE

CCL : IT-968GSE
Prepreg: IT-968GSEB

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

- ANSI Type : No ANSI
- Appliceable IPC-4101 /134；IPC-4103 /240/540
- 100G/400G Switch solution / Lower Dk (3.16 @ 10GHz) and Ultra low Df (0.0036 @ 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	 4.2 3.2	lb/inch
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) A. 1GHz B. 2GHz C. 5GHz D. 10 GHz	 2.5.5.9 2.5.5.13 2.5.5.13 2.5.5.13	(RC55%/RC70%) 3.33/3.00 3.23/2.90 3.17/2.87 3.16/2.84	--
Loss Tangent (Df) A. 1GHz B. 2GHz C. 5GHz D. 10 GHz	 2.5.5.9 2.5.5.13 2.5.5.13 2.5.5.13	(RC55%/RC70%) 0.0028/0.0022 0.0030/0.0024 0.0032/0.0024 0.0036/0.0029	--
Flexural Strength A. Length direction B. Cross direction	2.4.4	 410-430 340-370	N/mm^2
Young's Modulus A. Warp direction B. Fill direction	ASTM D3039	 15 14	Gpa
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)	ASTM D3638 / UL 746	CTI 2 (250-399)	Class (Volts)
Maximum Operating Temperature(MOT)	UL 746	130	˚C
Glass Transition Temperature (TMA)	2.4.24	175	˚C
Decomposition Temperature (5% W.L)	2.4.24.6	400	˚C
X/Y Axis CTE (40°C to 125°C)	2.4.41	12/14	ppm/˚C
	2.4.24.5	11/12	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