

ITEQ
Your Partner of Advanced Materials & Mass Lam Service

IT-998

CCL : IT-998TC
Prepreg: IT-998BS

High Tg / Low Dk / Super Ultra Low Loss Laminate & Prepreg

- ANSI Type : No ANSI
- Appliceable IPC-4101 /102；IPC-4103 /230/530
- 800G Solution / Very Stable Dk-Df across frequency
- Lower Dk (2.94 @ 10GHz) and Ultra low Df (0.0014 @ 10GHz)

Laminate properties

Items	IPC TM-650	Typical Value		Unit
Peel Strength A. Low profile copper foil (35 μm)	2.4.8	3.0		lb/inch
Volume Resistivity	2.5.17.1	10^{10}		MΩ-cm
Surface Resistivity	2.5.17.1	10^{10}		MΩ
Moisture Absorption	2.6.2.1	0.15		%
Permittivity (Dk) A. 2 GHz B. 5 GHz C. 10 GHz	 2.5.5.13 2.5.5.13 2.5.5.13	(RC 56%) 3.12 3.11 3.10	(RC 74%) 2.97 2.95 2.94	--
Loss Tangent (Df) A. 2 GHz B. 5 GHz C. 10 GHz	 2.5.5.13 2.5.5.13 2.5.5.13	(RC 56%) 0.0011 0.0012 0.0014	(RC 74%) 0.0010 0.0012 0.0013	--
Flexural Strength A.Length direction B. Cross direction	2.4.4	340 325		Mpa
Young's Modulus A.Warp direction B.Fill directionX	ASTM D3039	17 15		Gpa
Thermal Stress 10 sec 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 1 (400-599)		Class (Volts)
Maximum Operating Temperature(MOT)	UL 746	130		˚C
Glass Transition Temperature(DMA)	2.4.24.2	183		˚C
Decomposition Temperature (5% W.L)	2.4.24.6	403		˚C
X/Y Axis CTE (-40°C to 125°C)	2.4.41	11/14		ppm/˚C
	2.4.24.5	12/13		ppm/˚C
Z-Axis CTE (50 to 260°C)	2.4.24	2.8		%
Thermal Resistance A. T260 B. T288	2.4.24.1	> 60 > 60		Minutes Minutes