

ITEQ
Your Partner of Advanced Materials & Mass Lam Service

IT-998SETC

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

- 800G Solution
- Lower Dk (3.19 @ 10GHz) and Ultra low Df (0.0014 @ 10GHz)
- Very Stable Dk-Df across frequency

Laminate properties

Items	IPC TM-650	Typical Value		Unit
Peel Strength 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 58%) 3.47 3.44 3.41	(RC 74%) 3.22 3.20 3.19	--
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 58%) 0.0014 0.0015 0.0018	(RC 74%) 0.0011 0.0012 0.0014	--
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)	IEC 60112 / UL 746	CTI 1 (400-599)		Class (Volts)
Maximum Operating Temperature(MOT)	UL 746B	130		˚C
Glass Transition Temperature(DMA)	2.4.24.2	183		˚C
Decomposition Temperature (5wt%)	2.4.24.6	406		˚C
X/Y Axis CTE (-40°C to 125°C)	2.4.41	14/16		ppm/˚C
Z-Axis CTE (50 to 260°C)	2.4.24	2.7		%
Thermal Resistance A. T260 B. T288	2.4.24.1	 > 60 > 60		 Minutes Minutes