



IT-170GLETC

High Tg, Halogen Free & Low Dk, Multifunctional Epoxy Laminate & Prepreg

- Low Df, High Tg and high thermal reliability / Friendly Processing and CAF Resistance
- High Storage modules
- For HDI process applications

Laminate properties

Items	IPC TM-650	Typical Value	Unit
Peel Strength, minimum			
A. Low profile copper foil	2.4.8	4-5	lb/inch
B. Standard profile copper foil		6-7	
Volume Resistivity	2.5.17.1	1x10 ¹⁰	MΩ-cm
Surface Resistivity	2.5.17.1	1x10 ¹⁰	MΩ
Moisture Absorption, maximum	2.6.2.1	0.12	%
Permittivity (Dk, 75% resin content)			
A. 1GHz	2.5.5.9	3.33	--
B. 2GHz	2.5.5.13	3.30	
C. 5GHz	2.5.5.13	3.24	
D. 10GHz	2.5.5.13	3.14	
Loss Tangent (Df, 75% resin content)			
A. 1GHz	2.5.5.9	0.0095	--
B. 2GHz	2.5.5.13	0.0098	
C. 5GHz	2.5.5.13	0.0104	
D. 10GHz	2.5.5.13	0.0108	
Flexural Strength, minimum			
A. Length direction	2.4.4	550-590	N/mm ²
B. Cross direction		500-540	
Thermal Stress 10 s at 288°C			
A. Unetched / B. Etched	2.4.13.1	Pass / Pass	Rating
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(DSC)	2.4.25	170	°C
Decomposition Temperature	2.4.24.6	380	°C
X/Y Axis CTE (40°C to 125°C)	2.4.41	11-13	ppm/°C
Z-Axis CTE			
A. Alpha 1	2.4.24	40	ppm/°C
B. Alpha 2		225	ppm/°C
C. 50 to 260 Degrees C		2.3	%
Thermal Resistance			
A. T260 / B. T288	2.4.24.1	>60/ >60	Minutes