IT-170GLETC

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

- Low Df, High Tg and high thermal reliability
- High Storage modules
- Friendly Processing and CAF Resistance
- 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		3.33	
B. 2GHz	2.5.5.13	3.30	--
C. 5GHz		3.24	
D. 10GHz		3.14	
Loss Tangent (Df, 75% resin content)			
A. 1GHz		0.0095	
B. 2GHz	2.5.5.13	0.0098	--
C. 5GHz		0.0104	
D. 10GHz		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	2.4.13.1	Pass	Rating
B. Etched		Pass	
Flammability	UL94	V-0	Rating
Glass Transition Temperature(DSC)	2.4.25	170	˚C
Decomposition Temperature	2.4.24.6	380	˚C
X/Y Axis CTE (40℃ to 125℃)	2.4.41	11-13	ppm/˚C
Z-Axis CTE			
A. Alpha 1		40	ppm/˚C
B. Alpha 2	2.4.24	225	ppm/˚C
C. 50 to 260 Degrees C		2.3	%
Thermal Resistance			
A. T260	2.4.24.1	>60	Minutes
B. T288		>60	Minutes