



IT-168G1TC

High Speed, Halogen Free, Multifunctional Epoxy, Laminate & Prepreg

- Halogen Free, Low Dk and Low Df, Middle Tg and high thermal reliability
- Lead-Free Assembly Compatible
- 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		3.51	
B. 2GHz	2.5.5.13	3.45	--
C. 5GHz		3.40	
D. 10GHz		3.36	
Loss Tangent (Df, 75% resin content)			
A. 1GHz		0.009	
B. 2GHz	2.5.5.13	0.009	--
C. 5GHz		0.010	
D. 10GHz		0.010	
Flexural Strength, minimum			
A. Length direction	2.4.4	450-480	N/mm ²
B. Cross direction		390-420	
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	150	°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		40	ppm/°C
B. Alpha 2	2.4.24	230	ppm/°C
C. 50 to 260 Degrees C		3.0	%
Thermal Resistance			
A. T260	2.4.24.1	>60	Minutes
B. T288		>60	Minutes