



IT-168G1

High Speed, Multifunctional Epoxy, Laminate & Prepreg

- 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 B. Standard profile copper foil	2.4.8	4-5 6-7	lb/inch
Volume Resistivity	2.5.17.1	10 ¹⁰	MΩ-cm
Surface Resistivity	2.5.17.1	10 ¹⁰	MΩ
Moisture Absorption, maximum	2.6.2.1	0.12	%
Permittivity (Dk, 75% resin content) A. 1GHz B. 2GHz C. 5GHz D. 10GHz	2.5.5.13	3.51 3.45 3.40 3.36	--
Loss Tangent (Df, 75% resin content) A. 1GHz B. 2GHz C. 5GHz D. 10GHz	2.5.5.13	0.009 0.009 0.010 0.010	--
Flexural Strength, minimum A. Length direction B. Cross direction	2.4.4	450-480 390-420	N/mm ²
Thermal Stress 10 s at 288°C A. Unetched B. Etched	2.4.13.1	Pass Pass	Rating
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)	2.4.24	11-13	ppm/°C
Z-Axis CTE A. Alpha 1 B. Alpha 2 C. 50 to 260 Degrees C	2.4.24	40 230 3.0	ppm/°C ppm/°C %
Thermal Resistance A. T260 B. T288	2.4.24.1	>60 >60	Minutes Minutes