

ITEQ
Your Partner of Advanced Materials
& Mass Lam Service

IT-8300GA

High Tg / Low Dk / Ultra Low Loss / Halogen Free RF Microwave Product

- 5G Base Stations and mmWave Applications / Antenna Applications

Laminate properties

Items	IPC TM-650	Typical Value	Unit
Peel Strength A. Low profile copper foil (35 μm)	2.4.8	4.0	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	0.12	%
Permittivity (Dk) A. 2 GHz B. 5 GHz C. 10 GHz	TM-mode, CDR C-24/23/50	 3.0 3.0 3.0	--
Loss Tangent (Df) A. 2 GHz B. 5 GHz C. 10 GHz	TM-mode, CDR C-24/23/50	 0.0026 0.0026 0.0026	--
Flexural Strength (30 mil) A. Length direction B. Cross direction	2.4.4	 205-225 195-215	N/mm^2
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 2 (250-399)	Class (Volts)
Maximum Operating Temperature(MOT)	UL 746B	130	˚C
Glass Transition Temperature(TMA)	2.4.25	200	˚C
Decomposition Temperature (5wt%)	2.4.24.6	430	˚C
X/Y Axis CTE (-40°C to 150°C)	2.4.41	18/18	ppm/˚C
Z-Axis CTE A. Alpha 1 B. Alpha 2 C. 50 to 260 Degrees C	2.4.24	 40 140 1.7	 ppm/˚C ppm/˚C %
Thermal Resistance A. T260 B. T288	2.4.24.1	 > 60 > 60	 Minutes Minutes