



IT-8350G

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

- 5G Base Stations and mmWave Applications, Power Amplifiers, Antenna Applications
- Automotive Radar, LNB's for Direct Broadcast Satellites

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	0.09	%
Permittivity (Dk) A. 2 GHz B. 5 GHz C. 10 GHz	TM-mode, CDR C-24/23/50	3.48 3.48 3.48	--
Loss Tangent (Df) A. 2 GHz B. 5 GHz C. 10 GHz	TM-mode, CDR C-24/23/50	0.0025 0.0025 0.0025	--
Flexural Strength(30 mil) A. Length direction B. Cross direction	2.4.4	500-520 430-450	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
Glass Transition Temperature(TMA)	2.4.25	185	°C
Decomposition Temperature (5wt%)	2.4.24.6	430	°C
X/Y Axis CTE (-40°C to 125°C)	2.4.41	16/17	ppm/°C
Z-Axis CTE A. Alpha 1 B. Alpha 2 C. 50 to 260 Degrees C	2.4.24	50 250 2.5	ppm/°C ppm/°C %
Thermal Resistance A. T288 B. T300	2.4.24.1	> 60 > 60	Minutes Minutes

*The sample thickness : 0.508 mm

Note* *The above data is typical values and not guaranteed values.

*The data presented above relates to the perpendicular dielectric parameters of the substrates. Resonators with different diameters have been used for the measurements of the disk samples.