



# IT-8615G

*High Tg / High 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 <sup>10</sup>	MΩ-cm
Surface Resistivity	2.5.17.1	10 <sup>10</sup>	MΩ
Moisture Absorption	2.6.2.1	0.14	%
Permittivity (Dk) A. 2 GHz B. 5 GHz C. 10 GHz	TM-mode, CDR C-24/23/50	6.14 6.14 6.14	--
Loss Tangent (Df) A. 2 GHz B. 5 GHz C. 10 GHz	TM-mode, CDR C-24/23/50	0.0036 0.0037 0.0038	--
Flexural Strength, minimum A. Length direction B. Cross direction	2.4.4	390 360	N/mm <sup>2</sup>
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 1 (400-599)	Class (Volts)
Maximum Operating Temperature(MOT)	UL 746B	130	°C
Glass Transition Temperature(TMA)	2.4.25	205	°C
Decomposition Temperature (5wt%)	2.4.24.6	430	°C
X/Y Axis CTE (-40°C to 150°C)	2.4.41	15/14	ppm/°C
Z-Axis CTE A. Alpha 1 B. Alpha 2 C. 50 to 260 Degrees C	2.4.24	45 220 1.9	ppm/°C ppm/°C %
Thermal Resistance A. T288 B. T300	2.4.24.1	> 60 > 60	Minutes Minutes