

ITEQ
Your Partner of Advanced Materials
& Mass Lam Service

# 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<br>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)<br>A. 2 GHz<br>B. 5 GHz<br>C. 10 GHz | TM-mode, CDR<br>C-24/23/50 | <br>3.48<br>3.48<br>3.48 | -- |
| Loss Tangent (Df)<br>A. 2 GHz<br>B. 5 GHz<br>C. 10 GHz | TM-mode, CDR<br>C-24/23/50 | <br>0.0025<br>0.0025<br>0.0025 | -- |
| Flexural Strength(30 mil)<br>A. Length direction<br>B.Cross direction | 2.4.4 | <br>500-520<br>430-450 | $N/mm^2$ |
| Thermal Stress 10 sec at 288°C<br>A. Unetched<br>B. Etched | 2.4.13.1 | <br>Pass Visual<br>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 | 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<br>A. Alpha 1<br>B. Alpha 2<br>C. 50 to 260 Degrees C | 2.4.24 | <br>50<br>250<br>2.5 | <br>ppm/˚C<br>ppm/˚C<br>% |
| Thermal Resistance<br>A. T288<br>B. T300 | 2.4.24.1 | <br>> 60<br>> 60 | <br>Minutes<br>Minutes |