

ITEQ
Your Partner of Advanced Materials & Mass Lam Service

IT-150DATC

High Tg / Lead Free / Very Low Loss Laminate & Prepreg

- Automotive Radar application / Excellent electrical performance
- Lower Dk (3.64 @ 10GHz) and low Df (0.0065 @ 10GHz)Stable Dk/Df with different environment

Laminate properties

Items	IPC TM-650	Typical Value	Unit
Peel Strength, minimum A. Low profile copper foil	2.4.8	2.5-3.5	lb/inch
Volume Resistivity	2.5.17.1	$1x10^{10}$	MΩ-cm
Surface Resistivity	2.5.17.1	$1x10^{10}$	MΩ
Moisture Absorption, maximum	2.6.2.1	0.10	%
Permittivity (Dk, 50% resin content) A. 1GHz B. 2GHz C. 5GHz D. 10GHz	2.5.5.13	 3.73 3.71 3.69 3.64	--
Loss Tangent (Df, 50% resin content) A. 1GHz B. 2GHz C. 5GHz D. 10GHz	2.5.5.13	 0.0052 0.0053 0.0057 0.0065	--
Flexural Strength, minimum A. Length direction B. Cross direction	2.4.4	 430-460 390-410	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
Comparative Tracking Index (CTI)	IEC 60112 / UL 746	CTI 3 (175-249)	Class (Volts)
Maximum Operating Temperature(MOT)	UL 746B	130	°C
Glass Transition Temperature(DSC)	2.4.25	180	°C
Decomposition Temperature	2.4.24.6	370	°C
X/Y Axis CTE (40℃ to 125℃)	2.4.41	12/14	ppm/°C
Z-Axis CTE A. Alpha 1 B. Alpha 2 C. 50 to 260 Degrees C	2.4.24	 45 250 2.6	 ppm/°C ppm/°C %
Thermal Resistance A. T260 B. T288	2.4.24.1	 >60 >30	 Minutes Minutes