



# IT-8350A

**IT-8350A- Next Generation FR4 Lead free product for**

- LNBS - Direct Broadcast systems
- Antenna applications (2-40 GHz.)
- Dipole antennas

**Features**

- Thermoset system with 185°C Tg
- Very low loss ~0.038 at 10 GHz.
- FR4 Platform- Low Cost of materials and processing
- Excellent dimensional stability
- Very stable DK/Df with Temperature
- Ability to use very low profile Copper for reduced insertion loss.
- Highly suitable for Hybrids
- Ability to make high layer count boards

## Data sheet - IT-8350A

Property		Units	IT-8350A	
		Units	DK-3.50	
THERMAL	Thickness		mm	0.504(20 mils)
	Glass Transition Temp (Tg)	DMA	°C	200
		DSC		185
		TMA		180
	Solder Float		min.	> 60
	Solder Dip (PCT@1 hour and 121°C)			> 60
	Thermal Decomposition Temp (5wt%)		°C	365
	CTE: RT-150°C	X-axis	ppm/°C	15.5
	CTE: RT-150°C	Y-axis	ppm/°C	16.2
	CTE:α1	Z - axis	ppm/°C	45
	CTE:α2	Z - axis	ppm/°C	240
CTE	Z - axis	%	2.70	
ELECTRICAL	Thickness			0.504(20 mils)
	Dielectric Constant (Dk)	@2GHz		3.500
		@3GHz		3.500
		@5GHz		3.500
		@10GHz		3.500
	Dielectric Factor (Df)	@2GHz		0.0036
		@3GHz		0.0036
		@5GHz		0.0038
@10GHz		0.0038		
PHYSICAL	Water Absorption		%	0.20
	Peel Strength	1/2 oz (RTF )	lb/in	>4.0
	Flammability	-	Second	V0
	Thermal Conductivity		W/(mx °C)	0.48
	Elastic modulus	X-axis	GPa	15.10
Y-axis		GPa	15.30	