



# IT-8300GA

**IT-8300GA- Next Generation low DK Halogen free product for**

- 4 G LTE Base Stations
- 5 G Base Stations & mm wave applications
- Antenna applications

**Features**

- Thermoset system with 205 °C Tg
- Very low loss ~0.0020 at 10 GHz.
- Halogen Free
- Excellent dimensional stability
- Very stable DK/Df with Temperature
- Ability to use very low profile Copper for reduced insertion loss.
- Highly suitable for Hybrids

## Data sheet - IT-8300GA

Property		Units	IT-8300GA		
		Units	DK-3.00		
THERMAL	Thickness		mm	0.504(20 mils)	
	Glass Transition Temp (Tg)	DMA	°C	210	
		DSC		201	
		TMA		200	
	Time to Delam (T300)	With Cu	min.	> 60	
	Solder Float		min.	> 60	
	Solder Dip (PCT@1 hour and 121°C)			> 60	
	Thermal Decomposition Temp (5wt%)		°C	433	
	CTE: RT-150°C		X-axis	ppm/°C	19.1
	CTE: RT-150°C		Y-axis	ppm/°C	20.0
	CTE:α1		Z - axis	ppm/°C	65
	CTE:α2		Z - axis	ppm/°C	280
CTE		Z - axis	%	3.2	
ELECTRICAL	Thickness			0.504(20 mils)	
	Dielectric Constant (Dk)	@2GHz		3.01	
		@3GHz		3.01	
		@5GHz		3.01	
		@10GHz		3.00	
	Dielectric Factor (Df)	@2GHz		0.0018	
		@3GHz		0.0018	
		@5GHz		0.0019	
@10GHz			0.0020		
PHYSICAL	Water Absorption		%	0.22	
	Peel Strength	1 oz (RTF )	lb/in	>4.0	
	Flammability	-	Second	V0	
	Thermal Conductivity		W/(mx° C)	0.52	
	Elastic modulus	X-axis	GPa	14.10	
Y-axis		GPa	14.60		

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