



NP-730

■ FEATURES

- Stable dielectric constant
- Ultra low loss
- Low moisture absorption
- Excellent peel strength
- Excellent dimensional stability
- Low PIM

■ APPLICATIONS:

- Base Station Antennas
- RF Passive Components
- 5G Infrastructure
- Power Amplifiers(PA)

■ PERFORMANCE LIST

Characteristics	Unit	Conditioning	Typical Values	SPEC	Test Method	
Permittivity	Process	-	10GHz/23°C	3.0	-	2.5.5.5
	Design			3.0		Differential phase length
Loss Tangent	-	10GHz/23°C	0.0021	-	2.5.5.5	
			0.0022		SPDR	
Thermal Coefficient of ϵ_r	ppm/°C	10 GHz -50 to 150 °C	76		IPC-TM-650 2.5.5.13	
Volume resistivity	MΩ-cm	C-96/35/90	10 ⁹	10 ⁶ ↑	IPC-TM-650 2.5.17	
Surface resistivity	MΩ	C-96/35/90	10 ⁸	10 ⁴ ↑	IPC-TM-650 2.5.17	
Arc resistance	SEC	D-48/50+D-0.5/23	180↑	60 ↑	IPC-TM-650 2.5.1	
Dielectric breakdown	KV	D-48/50	45↑	20 ↑	IPC-TM-650 2.5.6	
Td (5% weight loss)	°C	TGA, 10°C/min	540	500 ↑	ASTM D3850	
CTE (z) (25 - 260°C)	ppm/°C	TMA	70-90	N/A	IPC-TM-650 2.4.24	
CTE (x,y) (25 - 260°C)	ppm/°C	TMA	20-30	N/A	IPC-TM-650 2.4.24	
Thermal stress	SEC	288°Cx10" solder dipping	300 ↑	10↑	IPC-TM-650 2.4.13.1	
Peel strength 1 oz	lb/in	288°Cx10" solder floating	10	6↑	IPC-TM-650 2.4.8	
Moisture absorption	%	D-24/23	0.04	0.15↓	IPC-TM-650 2.6.2.1	
Density (Specific Gravity)	g/cm ³		2.1	2.05~2.15	ASTM D792	
Flammability	-	C-48/23/50	V-0	V-0	UL94	
Thermal Conductivity	W/mK		0.6	0.2↑	ASTM F 433	
Dimensional stability X-Y axis	%	E-0.5/170	0.01-0.03	0.05↓	IPC-TM-650 2.4.39	
Passive Intermodulation	dBc		-158	<-153	: IEC-62037	

NOTE:The average value in the table refers to samples of 0.030" 1/1

PRODUCT SIZE & THICKNESS

THICKNESS INCH (mm)	THICKNESS TOLERANCE INCH (mm)	COPPER CLADDING OZ (μm)	PANEL SIZE	
			INCH	mm
0.010 (0.25)	±0.0010 (0.025)	0.5 (17) 1.0 (35) 2.0 (70)	48 x 36	1220 x 914
0.020 (0.50)	±0.0015 (0.038)		24 x 18	610 x 457
0.030 (0.76)	±0.0020 (0.050)		12 x 18	305 x 457
0.060 (1.52)	±0.0030 (0.075)			