



NP-826

■ FEATURES

- Stable dielectric constant
- Low moisture absorption
- Excellent dimensional stability
- Excellent peel strength

■ APPLICATIONS:

- LNBS
- Power amplifiers
- Antennas
- Passive components

■ PERFORMANCE LIST

Characteristics		Unit	Conditioning	Typical Values	SPEC	Test Method
Permittivity	Process	-	10GHz/23°C	2.60	-	2.5.5.5
	Design			2.60		Differential phase length
Loss Tangent		-	10GHz/23°C	0.0019	-	2.5.5.5
				0.0018		SPDR
Thermal Coefficient of ϵ_r		ppm/°C	10 GHz -50 to 150 °C	71		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	20↑	20 ↑	IPC-TM-650 2.5.6
Td (5% weight loss)		°C	TGA, 10°C/min	540	500 ↑	ASTM D3850
CTE (z) (50 - 260°C)		ppm/°C	TMA	185-215	N/A	IPC-TM-650 2.4.24
CTE (x,y) (50 - 260°C)		ppm/°C	TMA	20-50	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	11-13	6↑	IPC-TM-650 2.4.8
Moisture absorption		%	D-24/23	0.03	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		0.37	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) HTE,RTF 1.0 (35) HTE,RTF 2.0 (70) HTE,RTF	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 (0.076)			
0.125(3.18)	±0.0060 (0.154)			