



NP-536

■ FEATURES

- Low dielectric constant and low dissipation factor at high frequency range
- Greater design flexibility by allowing the same impedance
- Excellent dimensional stability
- Suit for Antenna · PA and LNB application

■ PERFORMANCE LIST

Characteristics		Unit	Conditioning	Typical Values	SPEC	Test Method
Permittivity	Process	-	10GHz/23°C	3.65	-	2.5.5.5
	Design	-	-	3.55	-	Differential phase length
Loss Tangent		-	10GHz/23°C	0.0028	-	2.5.5.5
				0.0031	-	SPDR
Volume resistivity		MΩ-cm	C-96/35/90	4x 10 ⁸ ~5x 10 ⁹	10 ⁶ ↑	2.5.17
Surface resistivity		MΩ	C-96/35/90	6x 10 ⁷ ~6x 10 ⁸	10 ⁴ ↑	2.5.17
Arc resistance		SEC	D-48/50+D-0.5/23	450↑	60 ↑	2.5.1
Dielectric breakdown		KV	D-48/50	60 ↑	40 ↑	2.5.6
Moisture absorption		%	D-24/23	0.01~0.02	0.35 ↓	2.6.2.1
Flammability		-	C-48/23/50	94V0	94V0	UL94
Peel strength 1 oz		lb/in	288°C x 10" solder floating	5~7	-	2.4.8
Thermal stress		SEC	288°C dipping	300 ↑	10 ↑	2.4.13.1
Pressure cooker 2 hr (2 atm 121°C)		SEC	288°C dipping	300 ↑	N/A	-
Dimensional stability X-Y axis		%	E-0.5/170	0.010-0.030	0.050 ↓	2.4.39
Coefficient of thermal expansion Z-axis before Tg		ppm/°C	TMA	30-50	N/A	2.4.24
Glass transition temp		°C	DMA	180	N/A	2.4.25
Td (5% weight loss)		°C	TGA, 10°C/min	380	325 ↑	-
PIM		dBc	--	<-153	-	-

Data shown are nominal values for reference only.

NOTE:
 The average value in the table refers to samples of .030" 1/1.
 Test method per IPC-TM-650

■ PRODUCT SIZE & THICKNESS

THICKNESS INCH (mm)	THICKNESS TOLERANCE	COPPER CLADDING OZ (µm)	SIZE	
			INCH	mm
0.004"(0.102)	±0.0005"(0.013)	0.5 (17) HTE,RTF 1.0 (35) HTE,RTF 2.0 (70) HTE,RTF	49 x 37 49 x 41.1 49 x 43	1245 x 0940 1245 x 1045 1245 x 1092
0.005"(0.127)	±0.0007"(0.018)			
0.010"(0.254)	±0.0015"(0.025)			
0.020"(0.508)	±0.0020"(0.050)			
0.030"(0.762)	±0.0020"(0.050)			
0.032"(0.813)	±0.0030"(0.076)			
0.040"(1.016)	±0.0030"(0.076)			
0.047"(1.194)	±0.0030"(0.076)			
0.060"(1.524)	±0.0050"(0.127)			