

Preliminary Data Sheet - RO4233[®] LNB Laminates

PROPERTY	TYPICAL VALUE	DIRECTION	UNITS	CONDITION	TEST METHOD
	RO4233				
Dielectric Constant Constant, ϵ	3.33 \pm 0.05	Z	-	10GHz/23°C	IPC-TM-650 2.5.5.5
Dissipation Factor tan, δ	0.0026	Z	-	10 GHz/23°	IPC-TM-650 2.5.5.5
Volume Resistivity	1.1 X 10 ¹⁰		M Ω	CONDA	IPC-TM-650 2.5.17.1
Surface Resistivity	9.9 X 10 ⁸		M Ω	CONDA	IPC-TM-650 2.5.17.1
Electrical Strength	343 (870)	Z	KV/mm (V/mil)	0.51mm (0.020")	IPC-TM-650 2.5.6.2
Tensile Modulus	(1528) (1560)	X Y	MPa (kpsi)	RT	ASTM D638
Tensile Strength	(8.8) (11.6)	X Y	MPa (kpsi)	RT	ASTM D638
Dimensional Stability	<0.2	X,Y	mm/m	after etch (mils/inch)	IPC-TM-650 +E2/150°2.4.39A
Coefficient of Thermal Expansion	13 11 37	X Y Z	ppm/°C	-55 to 288°C	IPC-TM-650 2.1.41
Tg	>280	-	°C	A	IPC-TM-650 2.4.24
Thermal Conductivity	0.61	-	W/m/°K	100°C	ASTM F433
Density	1.79	-	gm/cm ³	23°C	ASTM D792
Water Absorption	0.02	-	%	48 hrs immersion 0.060" sample Temperature 50°C	ASTM D570
Copper Peel Strength	5.1 (0.9)	pli (N/mm)		after solder float ½ oz EDC copper foil cladding	IPC TM-650 2.4.8

Visual Properties: Meets 2X Grade A per IPC-4103 (60 point count maximum).

STANDARD THICKNESS:	STANDARD PANEL SIZE:	STANDARD COPPER CLADDING:
0.020" (0.508mm)	24" X 18" (610 X 457 mm) 24" X 36" (610 X 915mm) 48" X 36" (1.224 X 915mm)	½ oz. (17 μ m) electrodeposited foil

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