



# LNB33C

## High Frequency Antenna Grade Circuit Materials

### FEATURES

- Glass-reinforced hydrocarbon and ceramic dielectric
- Reduced PIM
- Stable electrical properties versus frequency
- Low Z-axis expansion and excellent dimensional stability
- Lead-free process compatibility

### APPLICATIONS

- High frequency wireless communication
- Cellular Base Station Antennas
- WiMAX antenna networks

### GENERAL PROPERTIES

Test Items	Test Method	Test Condition	Unit	Direction	Typical Value
Dielectric Constant,Dk	IPC-TM-650 2.5.5.5	C-24/23/50,10GHz	-	Z	3.30±0.05
Dielectric Constant,Dk	IPC-TM-650 2.5.5.15	C-24/23/50,10GHz	-	X/Y	3.56±0.05
Dissipation Factor,Df	IPC-TM-650 2.5.5.15	C-24/23/50,10GHz	-	X/Y	0.0030
Thermal Coefficient of Dk	IPC-TM-650 2.5.5.5	-55°C to 85°C	ppm/°C	Z	+50
PIM	43dBm 1900MHz	50 ohm 0.0307"	dBc		-158
Volume Resistivity	IPC-TM-650 2.5.17.1	COND A	MΩ•cm		6.8×10 <sup>8</sup>
Surface Resistivity	IPC-TM-650 2.5.17.1	COND A	MΩ		5.3×10 <sup>7</sup>
Flexural Strength	IPC-TM-650 2.4.4	R.T.	MPa	X/Y	200/160
CTE	IPC-TM-650 2.4.24	50~260°C	ppm/°C	Z	30
	IPC-TM-650 2.4.41	50~260°C	ppm/°C	X/Y	12/12
Tg	IPC-TM-650 2.4.25	DSC	°C		>280
Td	IPC-TM-650 2.4.24.6	TGA(5% wt. loss)	°C		400
Thermal Conductivity	ASTM D5470	50°C	W/(m•K)	Z	0.65
Water Absorption	IPC-TM-650 2.6.2.1	D-24/23	%		0.05
Peel Strength (1oz HVLP)	IPC-TM-650 2.4.8	288°C/10s	N/mm[lb/in]		1.05 [6.0]
Flammability	UL94	C-48/23/50	Rating		V-0

Remarks: 1. All the typical value is based on the 0.780mm (0.0307") thickness specimen, but not guarantee data.

2. All the typical value listed above is for your reference only, please turn to Shengyi Technology Co., Ltd. for detailed information, and all rights from this data sheet are reserved by Shengyi Technology Co., Ltd.

Explanations: C=Humidity conditioning, D=Immersion conditioning in distilled water, E=Temperature conditioning.

The figures following the letter symbols indicate with the first digit the duration of the preconditioning in hours, with the second digit the preconditioning temperature in °C and with the third digit the relative humidity.



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### PRODUCT SPECIFICATION

Product	Standard Thickness	Standard Panel Size	Standard Copper Cladding
LNB33C	0.0107"(0.272mm) 2×1080 0.0207"(0.526mm) 4×1080 0.0307"(0.780mm) 6×1080 0.0407"(1.034mm) 8×1080 0.0507"(1.288mm) 10×1080 0.0607"(1.542mm) 12×1080	36"×48" 40"×48" 42"×48" Additional panel sizes may be available upon request.	Hoz, 1oz Low profile copper foil

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