

tec-speed 30.0 VT-370X LCTE

UL Approval: E214381 Version: 30/10/2025 /230

Laminate

General Information

- > Ceramic filled PTFE composites
- > Dk 2.95 with extremely low Df
- > Tight Dk and thickness control



Application

- > Patch Antenna
- > Satellite communication system
- > Power Amplifier
- > Aircraft Collision Avoidance Systems
- > Ground Radar Warning Systems

Availability

- > Core Thickness: 0.0035", 0.004", 0.005", 0.008"
- > Panel size: 18"*12", 18"*24", 20"*24", 21"*24", 21.3"*24.3"
- > Copper Foil Type and Thickness:

Copper Type	Copper Thickness	Remark
HVLP3	Hoz, 1oz	Standard
HTE	Hoz, 1oz, 2oz	Optional
RTF	Hoz, 1oz, 2oz	Optional
RA	Hoz, 1oz	Optional

Storage Condition & Shelf Life

Properties		Laminate
Storage Condition	Temperature	Room
	Relative humidity	/
Shelf Life		24 months (airproof)

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Properties

Properties	Test Method	Units	Typical Value
Electrical Properties			
Dielectric Constant @10GHz	IPC-TM-650 2.5.5.13	-	2.95
Dissipation Factor @10GHz	IPC-TM-650 2.5.5.13	-	0.00055
Thermal Coefficient of Dk	IPC-TM-650 2.5.5.5 -50~150°C	-	-55
Volume Resistivity	IPC-TM-650 2.5.17.1	MΩ-cm	7*10 ⁷
Surface Resistivity	IPC-TM-650 2.5.17.1	MΩ	4*10 ⁷
Thermal Properties			
Td	ASTM D3850	°C	525
Thermal Conductivity	ASTM D5470	W/mK	0.50
x, y-axis CTE	IPC-TM-650 2.4.24.5	ppm/°C	12/13
z-axis CTE	IPC-TM-650 2.4.24	ppm/°C	28
Mechanical Properties			
Peel Strength (1oz HVLP3) After thermal stress	IPC-TM-650 2.4.8	lb/in (N/mm)	16 (2.80)
Tensile Modulus	ASTM D638	MPa	840
Physical Properties			
Density	ASTM D792	gm/m ³	2.15
Moisture Absorption	IPC-TM-650 2.6.2.1	%	0.03
Flammability	UL-94	Rating	V-0
Lead free process compatible	-	-	YES

All test data provided are preliminary typical values and not intended to be specification values.

Disclaimer: The information and data contained in this technical literature is based on data and knowledge correct at the time of publishing/printing and is believed to be accurate and is offered in good faith for the benefit of the user. The user should make his own tests to verify the suitability of this product for any application before its use. All data are typical values only and subject to change without notice.