

## tec-speed 30.0 - VT-6702

UL Approval: E214381 Version: 11/10/2022

### Laminate

### General Information

- > Ceramic-filled PTFE composites
- > Excellent high frequency performance & low loss
- > Excellent mechanical strength
- > Excellent thermal reliability
- > Low CTE

### Application

- > Global Positioning & Navigation Systems
- > Ground Based and Airborne Radar
- > Phased Array Antenna
- > Beam Forming Networks

### Availability

Laminate	VT-6702
Dielectric Thickness	0.010" (0.25mm) 0.020" (0.50mm) 0.030" (0.75mm) 0.060" (1.52mm)
Panel Size	12"*18" (305*457mm) 24"*18" (610*457mm) Additional sizes may be available upon request
Copper Foil	Hoz, 1oz HTE & RTF Additional types may be available upon request.

### Storage Condition & Shelf Life

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

Note: The prepreg exceeding shelf life should be retested.

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## Properties Sheet

Properties	Test Method	Units	Conditions	Typical Value
Dielectric Constant (Dk) @10GHz	IPC-TM-650 2.5.5.5	-	10GHz	2.94 ± 0.04
Design Dk	Differential phase method	-	8-40GHz	2.94
Dissipation Factor	IPC-TM-650 2.5.5.5	-	10GHz	0.0011
Thermal Coefficient of Dk	IPC-TM-650 2.5.5.5	ppm/°C	10GHz	+12
Td @ 5% weight loss	ASTM D3850	°C	2 hrs @ 105 °C	520
Thermal Stress @ 288 °C	IPC-TM-650 2.4.13.1	Second	10 sec/cycle	>300
Peel Strength (1oz)	IPC-TM-650 2.4.8	lb/in	after thermal stress	9
CTE Z-axis	IPC-TM-650 2.4.24	ppm/°C	after thermal stress	24
Moisture Absorption	IPC-TM-650 2.6.2.1	%	D48/50	0.02

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 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.