

VT-901

UL Approval: E214381 Version: B7 /40 /41

Laminate/Prepreg

General Information

- > Tg 250°C
- > High Td
- > Improved Fracture Toughness
- > Low Z-axis CTE
- > Meets NASA requirements for no visible bromine



Application

- > Chip Manufacturers
- > Engine/Flight Controls
- > Power Supply/Backplane
- > Military and Burn-in Board

Availability

- > Core Thickness: 0.002" (0.05mm) to 0.125" (3mm), available in sheet or panel form
- > Copper Foil: 1/4oz to 6oz
- > Prepregs are available in roll or panel form
- > E-Glass styles: 7628, 1506, 2113, 2313, 3313, 2116, 1080, 106 etc

Properties		Prepreg		Laminate
Storage Condition	Temperature	Below 23°C (73°F)	Below 5°C (41°F)	Room
	Relative humidity	Below 55% RH	/	/
Shelf Life		3 months	6 months	24 months (airproof)

The prepreg exceeding shelf life should be retested.

CORPORATE HEADQUARTERS

Ventec Electronics Co. Ltd.
308 TaiShan Rd,
New District Suzhou,
Jiangsu, P.R. China 215129
T: +86 512-68091810
Email: sales@ventec.com.cn

EMEA REGIONAL HEADQUARTERS

Ventec Europe
Unit 1 Trojan Business Centre,
Tachbrook Park Estate,
Leamington-Spa, CV34 6RH, UK
T: +44 1926-889822
Email: sales@ventec-europe.com

AMERICAS REGIONAL HEADQUARTERS

Ventec USA
700 Lee St., Elk Grove Village,
Illinois, IL 60007,
United States of America
T: +1 630-4221627
Email: saleseast@ventec-usa.com

www.ventec laminates.com

VT-901

UL Approval: E214381 Version: B7 /40 /41

Laminate/Prepreg

Properties Sheet IPC-4101E /40 /41

Properties	Test Method	Units	Specification	Typical Value
Thermal Properties				
Tg	DSC	IPC-TM-650 2.4.25	°C	-
	TMA	IPC-TM-650 2.4.24	°C	200 minimum
Td		ASTM D3850	°C	-
T260		IPC-TM-650 2.4.24.1	Minute	-
T288		IPC-TM-650 2.4.24.1	Minute	-
Thermal Stress @ 288°C		IPC-TM-650 2.4.13.1	Second	Pass 10s
Z-axis CTE	Before Tg	IPC-TM-650 2.4.24	ppm/°C	-
	After Tg	IPC-TM-650 2.4.24	ppm/°C	-
	Total Expansion (50~260°C)	IPC-TM-650 2.4.24	%	-
X-Y CTE		IPC-TM-650 2.4.24	ppm/°C	-
MOT		UL 94	°C	-
Electrical Properties				
DK @ 1GHz RC 40%		IPC-TM-650 2.5.5.9	-	5.4 maximum
DF @ 1GHz RC 40%		IPC-TM-650 2.5.5.9	-	0.035 minimum
Volume Resistivity	After Moisture Resistance	IPC-TM-650 2.5.17.1	MΩ-cm	1.0E+6 minimum
	E-24/125	IPC-TM-650 2.5.17.1	MΩ-cm	1.0E+6 minimum
Surface Resistivity	After Moisture Resistance	IPC-TM-650 2.5.17.1	MΩ	1.0E+6 minimum
	E-24/125	IPC-TM-650 2.5.17.1	MΩ	1.0E+6 minimum
Electrical Strength		IPC-TM-650 2.5.6.2	Volt/mil (KV/mm)	762 (30) minimum
Dielectric Breakdown		IPC-TM-650 2.5.6	KV	40 minimum
Comparative Tracking Index (CTI)		ASTM D3638	Rating (Volt)	-
Arc Resistance		ASTM D495	Second	120 minimum
Mechanical Properties				
Peel Strength (1oz)	RTF	IPC-TM-650 2.4.8	lb/in (N/mm)	-
	HTE	IPC-TM-650 2.4.8	lb/in (N/mm)	5.14 (0.90) minimum
Flexural Strength	Warp	IPC-TM-650 2.4.4	Kpsi (MPa)	60 (415) minimum
	Fill	IPC-TM-650 2.4.4	Kpsi (MPa)	47 (325) minimum
Physical Properties				
Moisture Absorption		IPC-TM-650 2.6.2.1	%	1.0 maximum
Flammability		UL-94	Rating	HB minimum

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

CORPORATE HEADQUARTERS

 Ventec Electronics Co. Ltd.
 308 TaiShan Rd,
 New District Suzhou,
 Jiangsu, P.R. China 215129

T: +86 512-68091810

Email: sales@ventec.com.cn

EMEA REGIONAL HEADQUARTERS

 Ventec Europe
 Unit 1 Trojan Business Centre,
 Tachbrook Park Estate,
 Leamington-Spa, CV34 6RH, UK

T: +44 1926-889822

Email: sales@ventec-europe.com

AMERICAS REGIONAL HEADQUARTERS

 Ventec USA
 700 Lee St., Elk Grove Village,
 Illinois, IL 60007,
 United States of America

T: +1 630-4221627

Email: saleseast@ventec-usa.com

www.ventec laminates.com