

pro-bond 7FB

UL Approval: E214381 Version: 04/03/2025

VT-770B Black Prepreg & RCF & VT-770B(S) RCF / Prepreg & Resin Coated Film Bondply

VT-770B is a halogen-free, high Tg, ultra low Dk/Df, and ceramic-filled thermoset resin system in black color, specifically designed for use in multilayer PCBs with Ventec tec-speed laminates & prepregs, and it is also fully compatible with other resin systems in hybrid stack-ups.

General Information

- > Halogen free
- > Suitable for sequential laminations
- > Unreinforced adhesive for better electrical isotropic consistency
- > Excellent flow characteristics and filling ability, designed for fine line and space
- > Laser drillable
- > Excellent laser hole pattern consistency

Application

- > Interposers
- > Anti-shake Coils
- > Probe Cards
- > Packaging Modules

Storage Condition

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

pro-bond 7FB

UL Approval: E214381 Version: 04/03/2025

VT-770B Black Prepreg & RCF & VT-770B(S) RCF / Prepreg & Resin Coated Film Bondply

Availability

RCF

Type	Availability
Dielectric	VT-770B(S) --0.0043" (110 µm) VT-770B --0.0040" (100 µm) / 0.0020" (50 µm)
Standard Size	610mmx460mm (24"x18") 305mmx228mm (12"x9")
PET Film	50 µm

Prepreg

Glass Fabric	Press Thickness (µm)
2116 RC55%	125
1080 RC64%	75
106 RC71%	50

Properties

Item		Test Method	Units	VT-770B RCF	VT-770B (S) *RCF	VT-770B PP
T _g	DMA	IPC-TM-650 2.4.24.4	°C	260	260	260
T _d	TGA	ASTM D3850	°C	440	442	450
Thermal Stress	288°C 10sec/cycle	IPC-TM-650 2.4.13.1	cycle	>30	>30	>30
T ₂₈₈		IPC-TM-650 2.4.24.1	min	>30	>30	>30
D _k @ 10GHz	C-24/23/50	IPC-TM-650 2.5.5.13	–	2.8	3.2	3.6
D _f @ 10GHz	C-24/23/50	IPC-TM-650 2.5.5.13	–	0.0025	0.0033	0.004
Peel strength (1oz)	As Received	IPC-TM-650 2.4.8	Lb/in	4.0	4.0	4.0
X/Y-axis CTE	Before T _g	IPC-TM-650 2.4.24	ppm/°C	18	14	9~10
Z-axis CTE	Before T _g	IPC-TM-650 2.4.24	ppm/°C	18	15	25
Water absorption		IPC-TM-650 2.6.2.1	%	0.1	0.1	0.1
Flammability	UL 94	Rating		V-0	V-0	V-0

*VT-770B(S) refers to with chopped fiber.

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

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.