

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

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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
Tg	DMA	IPC-TM-650 2.4.24.4	°C	260	260	260
Td	TGA	ASTM D3850	°C	440	442	450
Thermal Stress	288°C 10sec/cycle	IPC-TM-650 2.4.13.1	cycle	>30	>30	>30
T288		IPC-TM-650 2.4.24.1	min	>30	>30	>30
Dk @ 10GHz	C-24/23/50	IPC-TM-650 2.5.5.13	–	2.8	3.2	3.6
Df @ 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 Tg	IPC-TM-650 2.4.24	ppm/°C	18	14	9~10
Z-axis CTE	Before Tg	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.

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