

Bondply VT-447 RCF

UL Approval: E214381 Version: 18/01/2026 - PRELIM

High Tg & Halogen Free Resin Coated Film

General Information

- > Halogen Free
- > Phenolic Cure System
- > UV Blocking
- > CAF Resistance
- > Excellent Thermal Reliability
- > Excellent Resin Filling

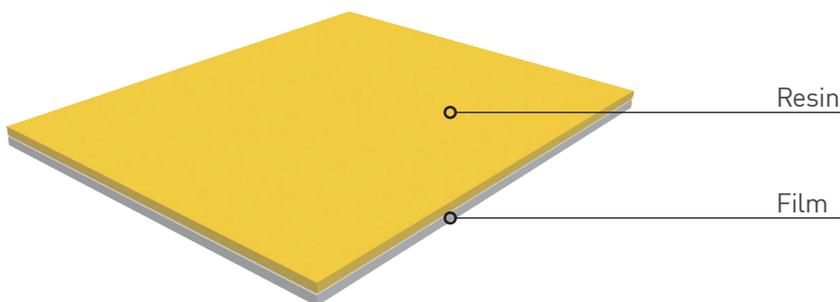
Application

It is specially designed to fill both single sided and double sided heavy copper in multi-layers, which minimize the usage of ultrathin prepreg or relieve PCB makers of the bother of cockamamie pro-coating to heavy copper.

Availability

- > Dielectric Thickness: .004"(100µm) / .005"(125µm) / .006"(150µm)
- > Standard Size: Width: 24.01"(610mm), Length: 18.11"(460mm)/20.08"(510mm)/20.98"(533mm)*
- > PET film Thickness: 50µm

Note: *For standard sizes discuss with customer.



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Properties Sheet

Properties	Test Method	Units	Specification	Typical Value	
Thermal Properties					
Glass Transition Temp. (Tg)	DSC	IPC-TM-650 2.4.25	°C	160 minimum	168
	DMA	IPC-TM-650 2.4.24.4	°C	170 minimum	180
Td	ASTM D3850	°C	350 minimum	368	
T288	IPC-TM-650 2.4.24.1	Minute	5 minimum	20	
Thermal Stress @ 288°C	IPC-TM-650 2.4.13.1	Second	Pass 10s	>600	
Electrical Properties					
Dielectric Constant @ 1GHz	IPC-TM-650 2.5.5.9	-	5.4 maximum	3.40	
Dissipation Factor @ 1GHz	IPC-TM-650 2.5.5.9	-	0.035 maximum	0.016	
Volume Resistivity	After Moisture Resistance	IPC-TM-650 2.5.17.1	MΩ-cm	1.0E+4 minimum	5.0E+8
	E-24/125	IPC-TM-650 2.5.17.1	MΩ-cm	1.0E+3 minimum	5.0E+6
Surface Resistivity	After Moisture Resistance	IPC-TM-650 2.5.17.1	MΩ	1.0E+4 minimum	5.0E+7
	E-24/125	IPC-TM-650 2.5.17.1	MΩ	1.0E+3 minimum	5.0E+6
Mechanical Properties					
Peel Strength (Hoz)	IPC-TM-650 2.4.8	lb/in (N/mm)	4 (0.7) minimum	5 (0.88)	
Flexural Strength	IPC-TM-650 2.4.4	Kpsi (MPa)	60 (415) minimum	72 (500)	
Physical Properties					
Moisture Absorption	IPC-TM-650 2.6.2.1	%	0.80 maximum	0.18	
Flammability	UL-94	Rating	V-0 minimum	V-0	

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

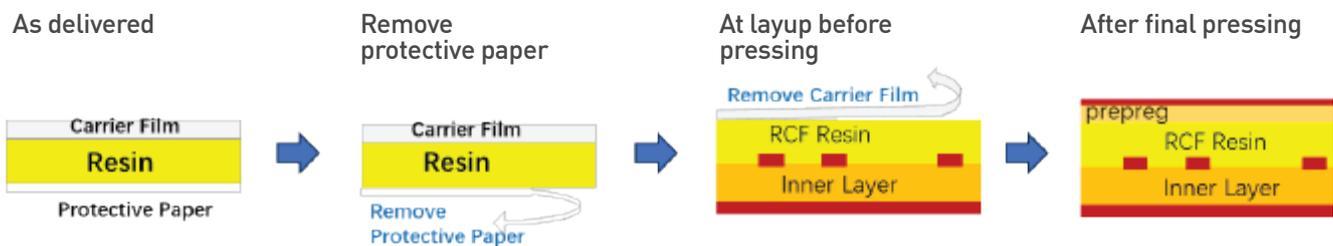
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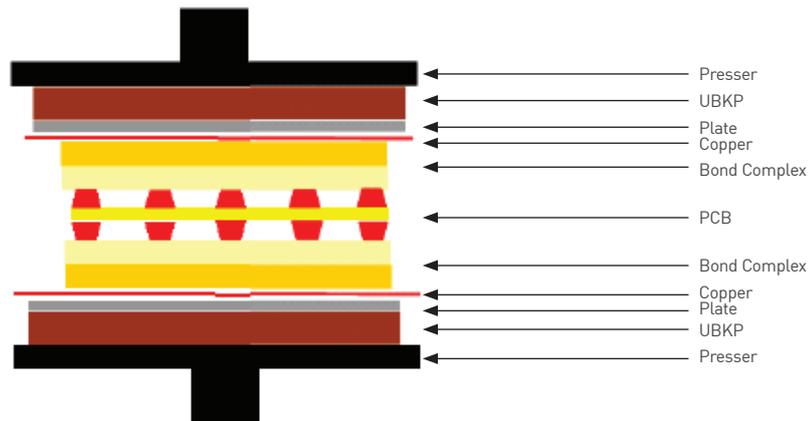
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Process for pre-bonding

- > Build-Up for pre-bonding



- > Build-Up for Multilayer



Press Profile

1. Heating rate (Rate of Rise) of material 80-130°C, Programmable Press: 2.0-3.0°C/min [Material Temperature]
2. Curing Temperature & Time: >60min at more than 185°C [Material Temperature]
3. Full Pressure: ≥350psi
4. Full Pressure Temperature: 70-80°C
5. Vacuuming should be continued until over 180°C [Material Temperature]
6. Cold Press Condition: Keep Plate @ Room Temperature by water; Pressure: 100psi; Dwell Time: 60minutes

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.