pro-bond 20FG2 RCF

UL Approval: E214381 Version: 20/09/2024

PROCESS GUIDE

pro-bond 20FG2 (VT-8728G2 RCF)

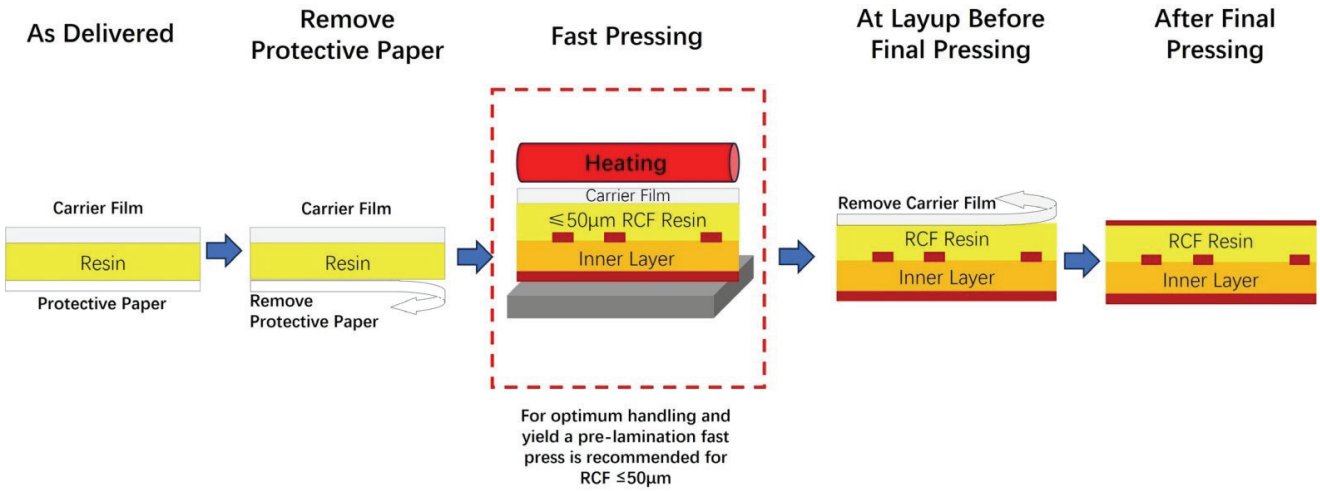
Precautions in Handling

- The RCF should be moved immediately into a controlled environment upon receipt.
- Any opened RCF package should be resealed with tape after use, and returned to a controlled environment. A FIFO inventory system is recommended.

Storage Condition & Shelf Life

		RCF	
Storage Condition	Temperature	Below 23°C (73°F)	Below 5°C (41°F)
	Relative Humidity	Below 55%	/
Shelf Life		3 Months	6 Months

Product Handling & Press Process Flow



Parameters	Fast Press
Temperature °C	90
Pressure (PSI)	70
Time (min)	0.5
Speed (m/min)	-

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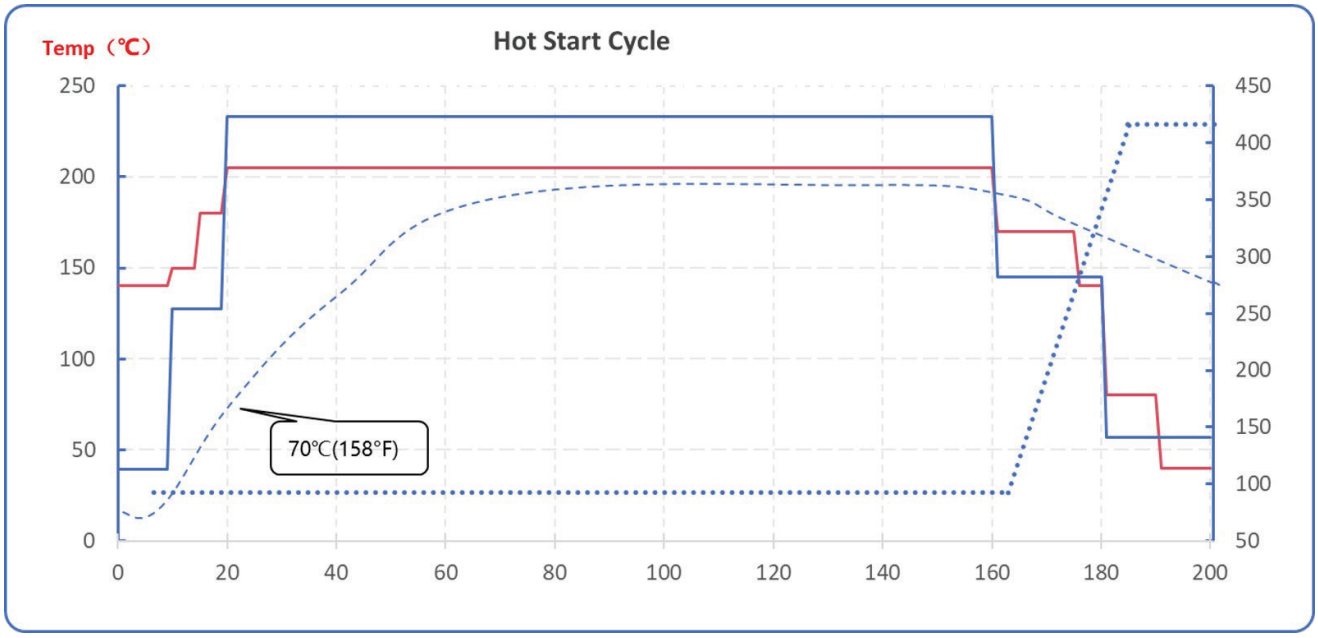
Press Parameters

1. Heating rate (Rate of Rise) of material [Material Temperature]: Programmable Press: 3.0 °C/min (5°F/min). Manual Press: 3~6°C/min (5~10°F/min)
2. Curing Temperature & Time: >90min at more than 190°C (374°F) [Material Temperature]
3. Full Pressure: ≥420psi. It's a guideline that full pressure is started before70°C of material temperature.
4. Vacuuming should be continued until over 140°C (284°F) [Material Temperature]
5. Cushion for Pressure evenness is needed. (Sheets of kraft paper etc.)



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Typical Drilling Conditions

Diameter (mm)	Spindle Speed (KRPM)	Feed Rate (m/mm)	Retract Rate (m/mm)	Hit Count
0.15	75	1	7.6	250
0.20	73	2.5	7.6	300
0.30	75	2.7	7.6	400
0.40	75	2.8	10.2	500
0.50	70	2.8	25.4	500

1. Drilling parameters should be adjusted depending on hole size, layer count, panel thickness, stack count and stack height etc;
2. Please adjust drilling parameters after checking qualities of through holes;
3. Entry board FR4 30mil; Exit board FR4 20mil;1panel/Stack

Desmear Process

If panels have been exposed to moisture, bake the boards at 105ºC-120ºCfor one or more hours to drive out moisture.

The desmear Plasma time is typically half that of standard FR4/epoxy times because **VT-8728G2 RCF** resin system tends to etch back very quickly.

Permanganate desmear IS NOT RECOMMENDED and has been shown to be very aggressive on VT-8728G2 RCF resulting in excessive etchback. This is due to the high silica filler content and thermoset content in the resin system.

Consult the chemical supplier when setting othersparameters for pro-bond.