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NAN YA PLASTICS CORPORATION
ELECTRONIC MATERIALS DIVISION.
COPPER CLAD LAMINATE DEPARTMENT

NO. 201. TUNG HWA N. ROAD,
TAIPEI, TAIWAN.

Glass cloth base epoxy resin
Flame retardant prepreg

NP-175FB PREPREG

■ FEATURES

- Dicy-Free & Low C.T.E
- Lead-Free Compatible
- Excellent dimensional stability and through-hole reliability
- Superior CAF-Resistance (Anti-migration)
- We recommend to evaluate the drilling property.
- High luminance of multi-functional epoxy contrast with copper for A.O.I
- IPC-4101B/99
- Different oxide treatment may result in variations in the heat resistance properties of the laminates after processing. Pre-production batch runs are recommended to ensure compatibility of materials with chemicals.

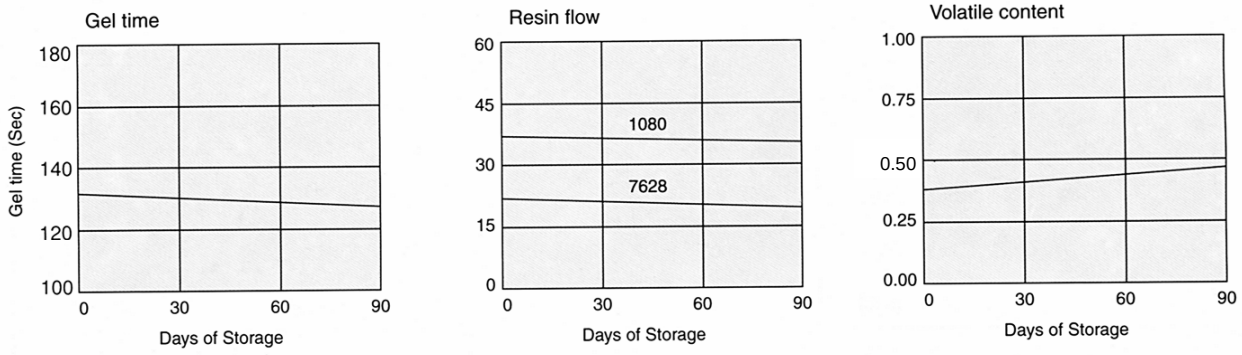
■ PERFORMANCE LIST

Specification: IPC-4101B is applicable

Data shown are nominal values for reference only. (Remained Copper 70-80%)

Glass style	RC%	RF%	GT sec (170℃)	VC%	After Pressed Thickness (per ply)	
					mm	Mil
7628HR	52 ± 3	31 ± 5	130 ± 20	1.5 ↓	0.199 ± 0.01	7.8 ± 0.4
7628MR	49 ± 3	28 ± 5			0.191 ± 0.01	7.5 ± 0.4
7628	45 ± 3	21 ± 5			0.181 ± 0.01	7.1 ± 0.4
1506MR	54 ± 3	34 ± 5			0.160 ± 0.01	6.3 ± 0.4
1506	50 ± 3	27 ± 5			0.150 ± 0.01	6.0 ± 0.4
2116HR	60 ± 3	40 ± 5			0.132 ± 0.01	5.2 ± 0.4
2116MR	56 ± 3	34 ± 5			0.118 ± 0.01	4.6 ± 0.4
2116	52 ± 3	28 ± 5			0.105 ± 0.01	4.1 ± 0.4
2313	57 ± 3	35 ± 5			0.090 ± 0.01	3.5 ± 0.4
2113	58 ± 3	35 ± 5			0.090 ± 0.01	3.5 ± 0.4
2112	62 ± 3	35 ± 5			0.079 ± 0.008	3.1 ± 0.3
1080HR	70 ± 3	50 ± 5			0.076 ± 0.008	3.0 ± 0.3
1080MR	67 ± 3	45 ± 5			0.071 ± 0.008	2.8 ± 0.3
1080	64 ± 3	40 ± 5			0.064 ± 0.008	2.5 ± 0.3
106	70 ± 3	42 ± 5			0.048 ± 0.008	1.91 ± 0.3

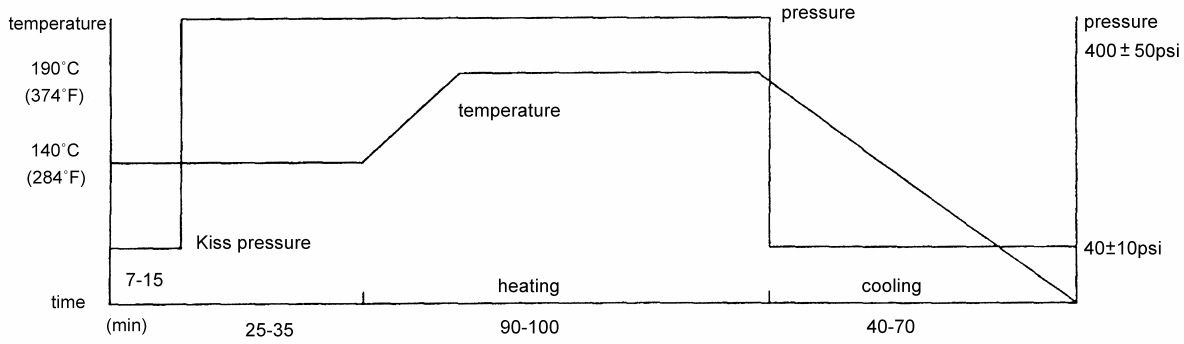
Storage Stability



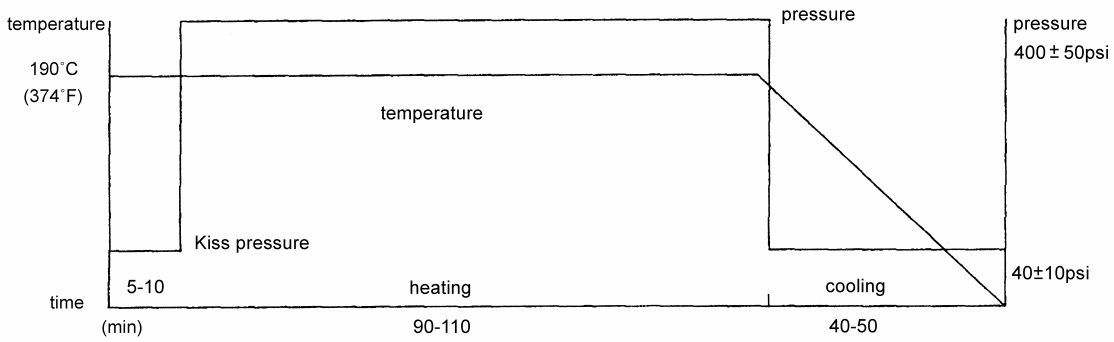
Storage Condition: 20℃, 50% RH for 3 months
: Max 5℃ for 6 months

Recommended press cycles:

A:2T2P (2 temperature step/2 pressure step)



B:1T2P (1 temperature step/2 pressure step)



Suggestions:

1. Heating rate of material between 70℃ and 140℃
   1-3℃/min is acceptable.
   1.5-2.5℃/min would be better.
2. Temperature of material over 170℃ must be held for at least 60min. to allow epoxy resin to fully cure.
3. The pressure should be kept below 100psi during cooling to ambient temperature.
4. Cooling rate of material should be kept under 2.5℃/min when the temperature of material is over 100℃, in order to avoid introducing twist.