



## GW2000-1

### High Performance ,Mid-df & Halogen free

#### 特点

- ◆多层、HDI 无铅制程兼容
- ◆Tg ≥150℃ (DSC)
- ◆阻燃性能达到 UL94 V-0 级
- ◆低 Z 轴热膨胀
- ◆符合 IPC 4101/128 要求

#### FEATURES

- ◆Suitable for multi-layer & HDI lead-free process
- ◆Tg ≥150℃ (DSC)
- ◆Flammability UL94 V-0
- ◆Low CTE (Z-axis)
- ◆IPC 4101/128

#### 应用领域

- 多层及高多层 PCB
- 手机、电脑
- 便携式电子产品
- 仪器仪表

#### APPLICATIONS

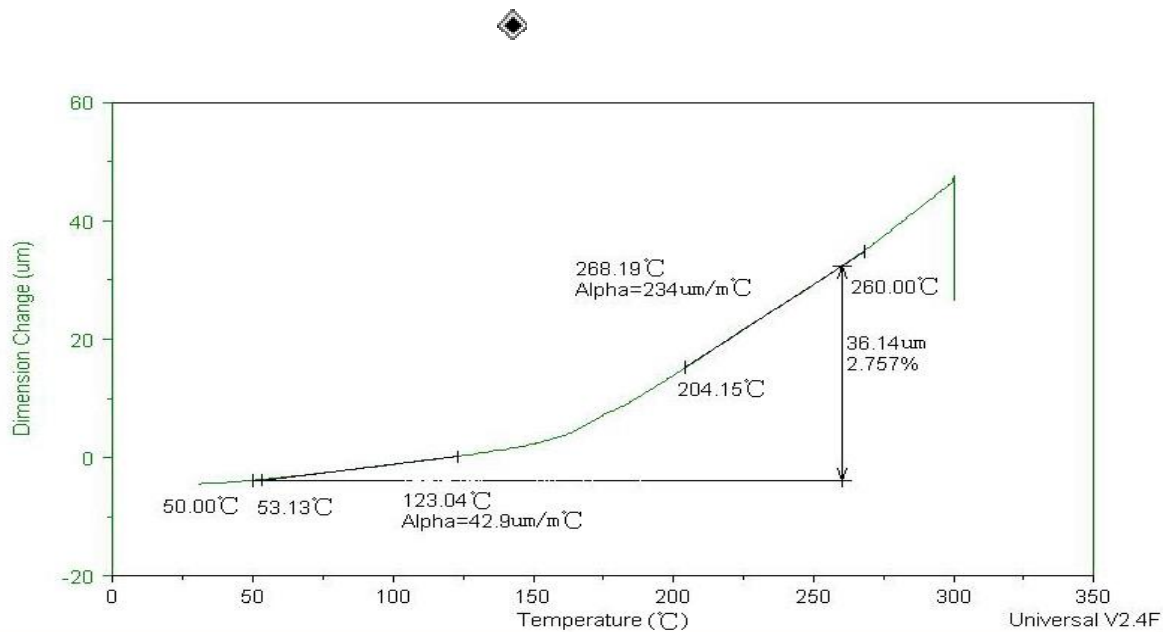
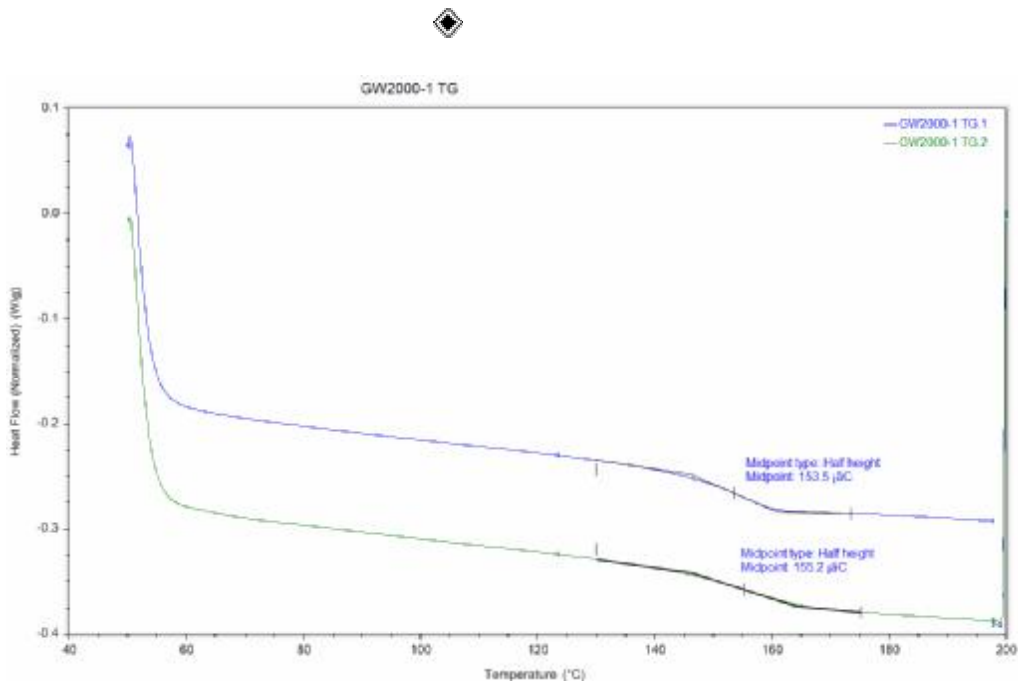
- High Count Layer PCB
- Mobile phone、computer
- Portable electronics
- Instrument

### GENERAL PROPERTIES

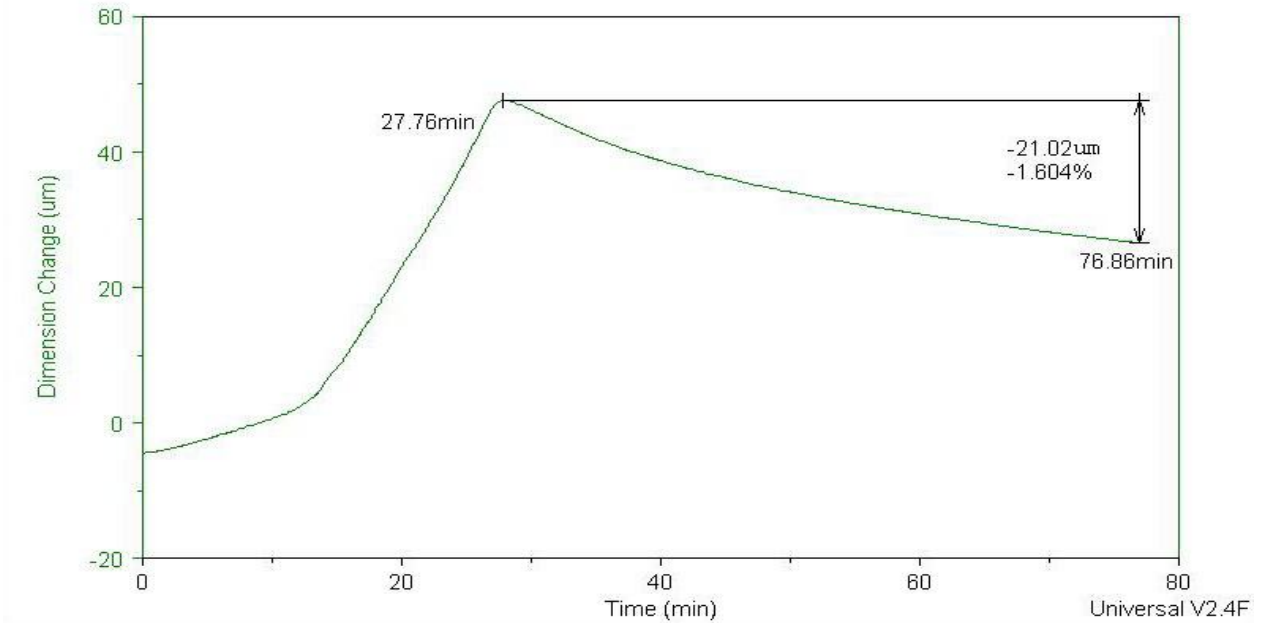
Test Item	Treatment Condition	Unit	SPEC	Typical Value	
Tg	DSC	℃	≥150	152	
Td	TGA(5%Wt Loss,10℃/min)	℃	>325	386	
CTE Z-axis	TMA	μ m/m℃	Before Tg	<60	42.9
			After Tg	<300	234.0
		50~260℃	%	<3.5	2.757
T288	TMA	min	≥5	>60	
T300	TMA	min	AABUS	1	
Surface Resistivity	After moisture resistance	M Ω	≥10 <sup>4</sup>	6.5×10 <sup>7</sup>	
Volume Resistivity	After moisture resistance	M Ω -cm	≥10 <sup>4</sup>	8.7×10 <sup>8</sup>	
Dielectric Breakdown	D-48/50+D-0.5/23	kV	≥40	45	
Thermal Stress	288℃,dip	s	>10s no delamination	210s no delamination	
Dielectric Constant(1GHz)	C-24/23/50	-	≤5.4	4.5	
Dissipation Factor(1GHz)	C-24/23/50	-	≤0.035	0.012	
Flexural Strength	LW	A	N/mm <sup>2</sup>	≥415	534
	CW			≥345	440
Flammability	UL-94	-	V-0	V-0	

			$\geq$	1.6
			$\leq$	0.88 0 0 .00 )t2.76.33
			< 900	164
			< 900	20

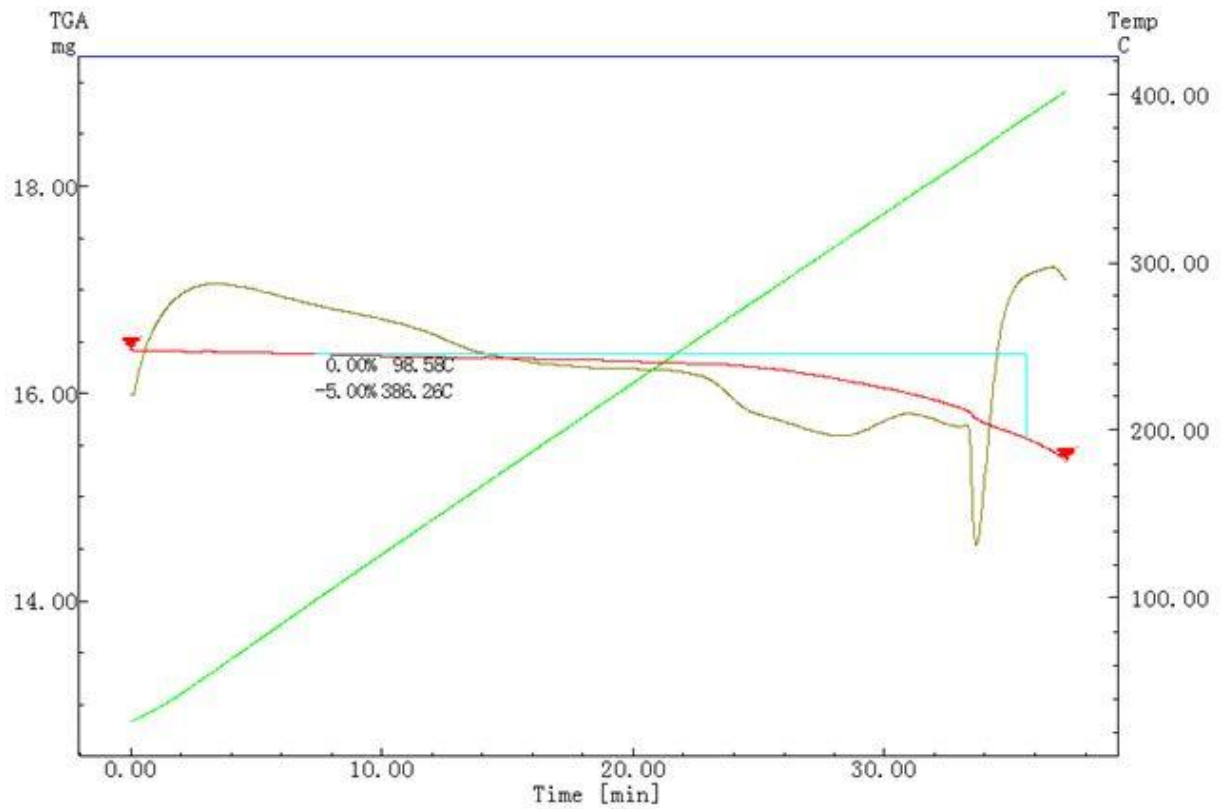
Sample Thickness: 1.6mm, copper foil thickness 1 oz



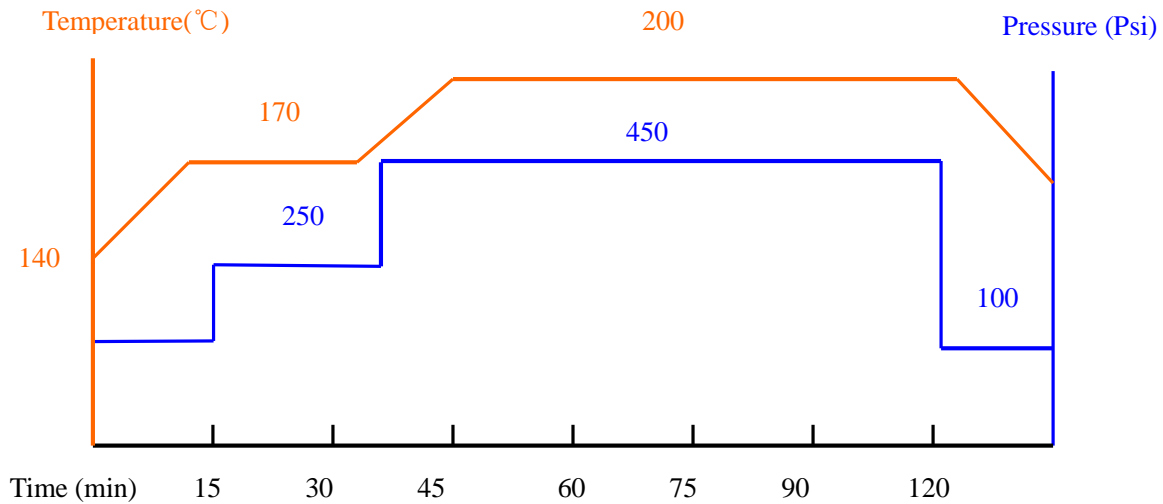
◆ T300



◆ Td



## Hot Pressing Cycle



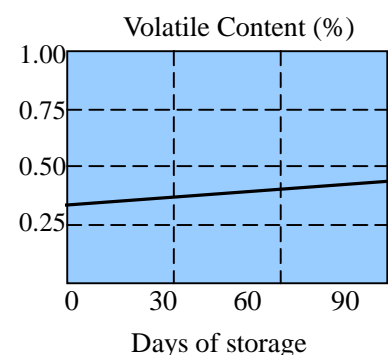
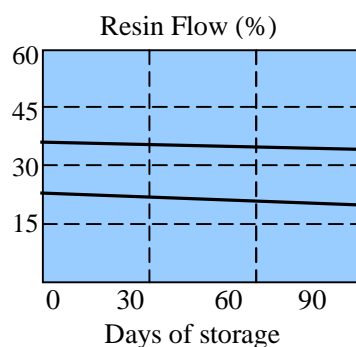
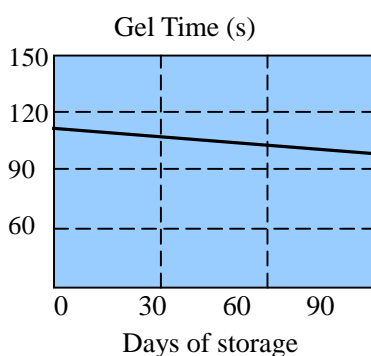
## Suggestions

- ◇ Temperature of material range 80 ~120°C , heating rate suggestions 1~2.5°C/min (ideally 1.5~2.0°C/min)
- ◇ Temperature of material above 190°C , must be held for 60~70 minutes to ensure epoxy resin to fully cure

## Storage Condition

- ◇ <23°C , <50% RH for 3 months
- ◇ Avoid ultraviolet rays and strong lights

## Prepreg Storage Stability



## Performance List for prepreg

PP style	Resin content (%)	Resin flow (%)	Gel time (s) ±20	Volatile (%)
7628	41 ± 3	20 ± 5	130	0.5 ↓
7628	48 ± 3	28 ± 5		
1506	44 ± 3	22 ± 5		
1506	48 ± 3	26 ± 5		
1506	57 ± 3	34 ± 5		
2116	50 ± 3	23 ± 5		
2116	61 ± 3	35 ± 5		
2313	54 ± 3	25 ± 5		
2313	62 ± 3	35 ± 5		
1080	61 ± 3	30 ± 5		
1080	70 ± 3	44 ± 5		
106	76 ± 3	44 ± 5		
1037	76 ± 3	44 ± 5		
1027	76 ± 3	44 ± 5		

We can provide PP with different style and resin content to satisfy the consumers.

## Standard Size

Style	Length	Width
1080/106/1037/1027	300m/roll	1260 ± 0.2 mm
2313/2116	200m/roll	
1506	150m/roll	
7628	150m/roll 125m/roll	