

◆ 特性/Features

- Tg ≥ 170°C (DSC)
- 优良耐CAF性
- Excellent Anti-CAF resistance
- 优良的通孔可靠性
- Excellent T/H reliability
- 低Z轴热膨胀系数
- Low Z-CTE 2.9%
- 优异的耐热性 Td = 347°C, T288 = 30min
- High thermal performance Td = 347°C, T288 = 30min
- 优异的尺寸稳定性
- Excellent in dimension stability

◆ 应用领域/Applications

适合于高多层PCB、计算机及外围设备、通讯设备、汽车电子。  
Suitable for high-count layer PCB, computer, communication equipment, automotive electronics.

◆ 主要特性/General properties

检测项目 Item	单位 Unit	检测条件 Test Condition	规范值 Spec	典型值 Typical Value
玻璃化转变温度 Tg	°C	DSC	≥170	182
剥离强度 1oz Peel Strength	N/mm	288°C, 10S	≥1.05	1.41
热应力 Thermal stress	S	288°C, solder dip	> 10	180 s No delamination
弯曲强度 Flexural Strength	N/mm <sup>2</sup>	经向 LW 纬向 CW	≥415 ≥345	580 482
燃烧性 Flammability	-	E 24/125	UL94V-0	V-0
表面电阻 Surface Resistivity	MΩ	After moisture	≥1.0 × 10 <sup>4</sup>	9.8 × 10 <sup>7</sup>
体积电阻 Volume Resistivity	MΩ · cm	E-24/125 After moisture	≥1.0 × 10 <sup>6</sup> ≥1.0 × 10 <sup>6</sup>	5.3 × 10 <sup>6</sup> 3.21 × 10 <sup>9</sup>
介电常数 Dielectric Constant	-	1 MHz C 24/23/50	≤5.4	4.7
介电损耗角正切 Loss Tangent	-	1 MHz C 24/23/50	≤0.035	0.016
耐电弧 Arc Resistance	S	D48/50 + D0.5/23	≥60	122
击穿电压 Dielectric Breakdown	KV	D48/50 + D0.5/23	≥40	58
吸水率 Moisture Absorption	%	D24/23	≤0.35	0.01
热分解温度 Td	°C	Weight Loss 5%	≥340	347
CTE Z-axis	Alpha 1	TMA	≤60	45
	Alpha 2		≤300	270
	50 - 260 °C		≤3.0	2.9
	T260	TMA	≥30	60
	T288	TMA	≥15	30
	T300	TMA	≥2	5
相比漏电起痕指数 CTI	V	IEC-60112	175 ~ 250	200

Specimen Thickness : 1.6mm ; Specification sheet : IPC-4101C/126. is for your reference only  
Explanation: C: Humidity conditioning; D: Immersion conditioning in distilled water ;  
E: Temperature conditioning ;

# H1170

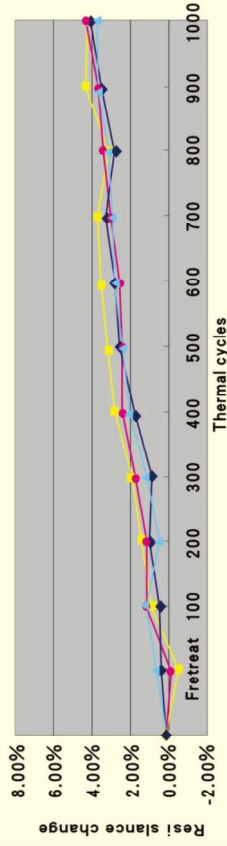
◆ 热压力容器蒸煮测试/PCT (high pressure cooker test)

PCT (E-120°C/ 105KPa)	Solder Dipping (288°C,10S)		
	Normal FR-4	H 1170	
30min	OK	OK	OK
60min	OK	OK	OK
120min	NG	NG	OK



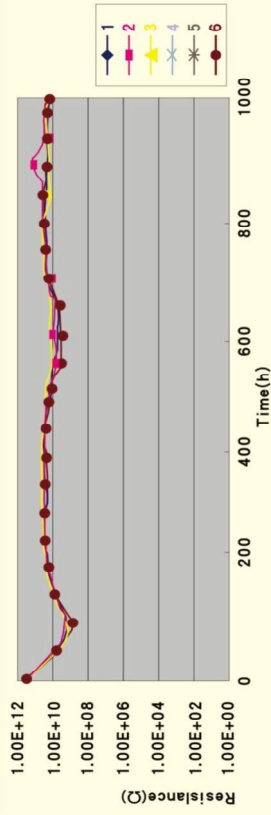
TGA

◆ 优秀的耐热稳定性/Excellent Thermal Resistance



前处理: 125°C烘烤2小时 / Pre-Treatment: 125°C/2hour in the oven  
 循环条件: -40°C (30min) ~ +125°C (30min), 转换时间 < 2min  
 Thermal shock condition: -40°C (30min) ~ +125°C (30min), transfer time < 2min

◆ 优秀的耐CAF稳定性/Excellent Anti-CAF Performance



测试条件: 孔心距: 0.65mm, 孔径: 0.3mm, DC50V/85°C/85%RH  
 Specimen: Backset: 0.65mm, Aperture: 0.3mm, DC50V/85°C/85%RH

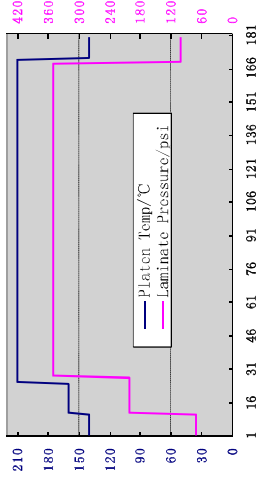
## 半固化片介绍-H1170P

### Prepreg instruction

#### ◆ H1170P (UV Prepreg) :

prepreg type	Resin Content(%)		胶化时间 Gel Time (sec/171°C)	流动度 Resin Flow %	压合厚度 Cured thickness(mm/mil)			
	含量 R/C(%)	公差 Tolerance			Nominal			
	%	±			mm	mil	mm	mil
7628HRC	52	2	110 ± 20	30 ± 5	0.234	9.21	0.022	0.85
	50	2	110 ± 20	29 ± 5	0.223	8.78	0.022	0.85
	48	2	110 ± 20	28 ± 5	0.212	8.35	0.020	0.8
7628	45	2	115 ± 20	24 ± 5	0.197	7.76	0.019	0.75
	43	2	115 ± 20	22 ± 5	0.188	7.40	0.018	0.7
1506	48	2	115 ± 20	29 ± 5	0.166	6.54	0.017	0.65
	45	2	115 ± 20	28 ± 5	0.155	6.10	0.015	0.6
2116	58	2	110 ± 20	35 ± 5	0.138	5.43	0.014	0.55
	57	2	110 ± 20	35 ± 5	0.136	5.35	0.013	0.5
	55	2	115 ± 20	33 ± 5	0.127	5.00	0.013	0.5
1080	53	2	115 ± 20	31 ± 5	0.12	4.72	0.011	0.45
	50	2	120 ± 20	29 ± 5	0.111	4.37	0.011	0.45
	68	2	115 ± 20	44 ± 5	0.087	3.43	0.008	0.3
1080	65	2	120 ± 20	42 ± 5	0.077	3.03	0.008	0.3
	63	2	120 ± 20	39 ± 5	0.074	2.91	0.008	0.3

#### ◆ 建议压制程式: Suggest cycle



Heat-up rate: 1.5~2.5°C/min(80~140°C)

Curing time: >80min(>190°C)

The hot pressing parameters is for your reference only, please turn to Zhejiang Huazheng New Material Co., Ltd for detailed information.

**储存条件:** 温度 ≤ 23°C, 湿度 ≤ 50%, 保存时间 3 个月;

温度 ≤ 5°C, 密封条件下, 保存时间 6 个月.

**Storage Condition:** T ≤ 23°C & ≤ 50%RH, Within 3 months; T ≤ 5°C Within 6 months (seal condition).

在上述要求内, 我司可立即安排 PP 送样; 若有特殊要求, 由供需双方商定。

Follow above condition, our company will arrange sample immediately. We can discuss if you have any special requirement.