

## H1170 Lead-free Anti-CAF

### 特性/ Features

Tg≥170℃ (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℃, T288=30min    High thermal performance Td =347℃ ,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	℃	DSC	≥170	182	
剥离强度 1oz Peel Strength	N/mm	288℃, 10S	≥1.05	1.41	
热应力 Thermal stress	S	288℃,solder dip	>10	180 s No delamination	
弯曲强度 Flexural Strength	N/mm <sup>2</sup>	经向 LW	≥415	580	
		纬向 CW	≥345	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>	2.52×10 <sup>7</sup>	
体积电阻 Volume Resistivity	MΩ·cm	After moisture	≥1.0×10 <sup>4</sup>	3.21×10 <sup>8</sup>	
介电常数 Dielectric Constant	—	1 MHZ C 24/23/50	≤5.4	4.7	
介质损耗角正切 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	0.10	
热分解温度 Td	℃	Weight Loss 5%	≥340	347	
CTE Z-axis	Alpha 1	ppm / °C	TMA	≤60	45
	Alpha 2	ppm / °C		≤300	270
	50 - 260 °C	%		≤3.0	2.9
T288	min	TMA	≥15	30	
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 Lead-free Anti-CAF

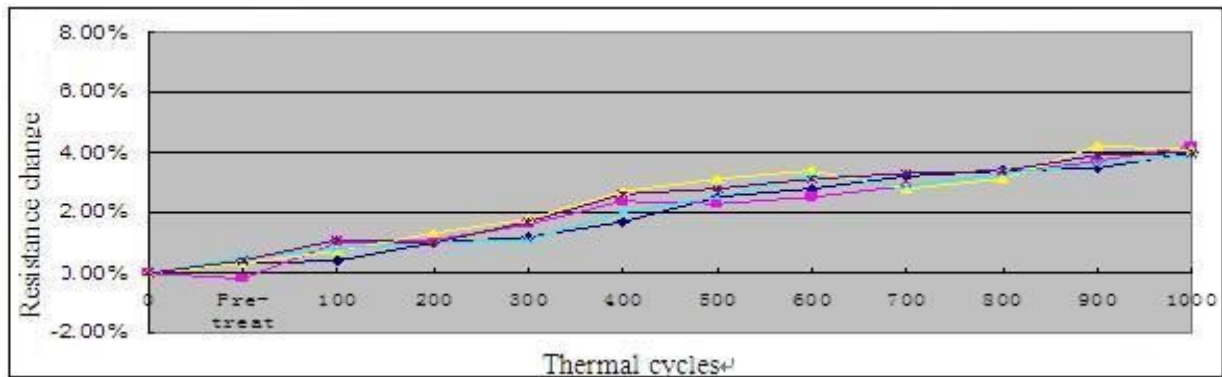
◆ 热压力容器蒸煮测试 / PCT (High pressure cooker test)

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



**TGA**

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

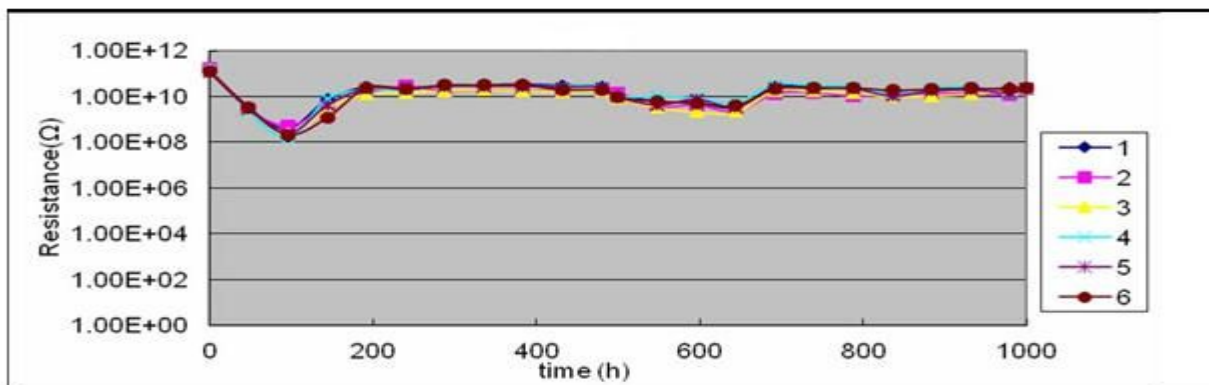


前处理: 125°C烘烤 2 小时 / Pre-Treatment: 125°C/2hour in the oven

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

产品系列 / Purchasing information

厚度 Thickness	铜箔 Copper foil	标准尺寸 Standard size
0.10~3.2mm	12um ~ 105um	37"×49"、41"×49"、43"×49"

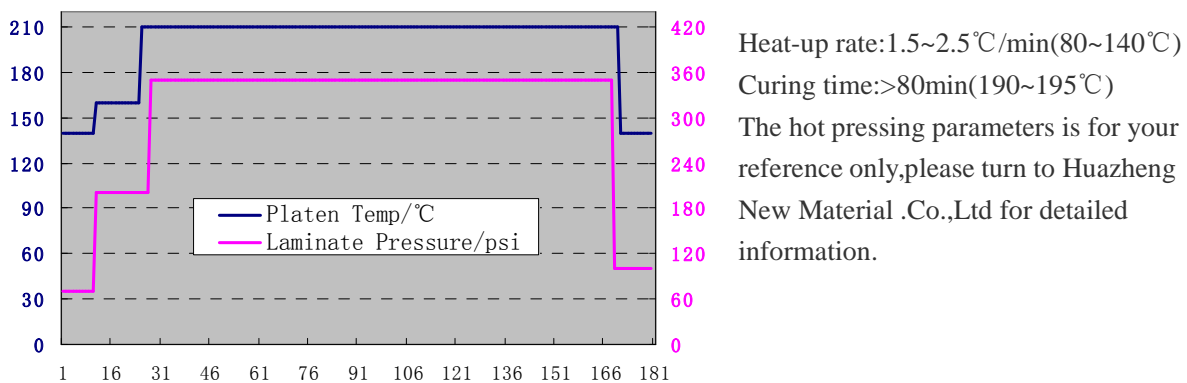
※ Other sheet size and thickness could be available upon request

## 半固化片介绍/ Prepreg instruction

### H1170 P (UV Prepreg) :

prepreg type	Resin Content(%)		Gel Time (sec/171°C) 胶化时间	Resin Flow 流动度	压合厚度 Cured thickness(mm/mil)			
	R/C(%)含量	Tolerance 公差			Nominal		Range(±)mil	
	%	±	S	%	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
	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
1080	68	2	115±20	44±5	0.087	3.43	0.008	0.3
	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



**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 upwards condition,

Our company will arrange sample immediately. We can negotiation if you have special requirement.