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H155H Halogen-free

特性/ Features

无卤产品, Halogen-free product, Tg: 150±5°C

阻燃性达到UL94V-0 / Flammability UL 94V-0 .

可依需求提供高CTI的无卤板材/ High CTI Halogen-free product available upon request (CTI 600)

应用领域/ Applications

手机、电脑、通讯设备、仪器仪表、摄像机、电视机等。

Mobile phone, Computer, Communication equipment, Instrumentation, VCR, Television, etc.

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	150±5°C	150.2
剥离强度 1oz Peel Strength	N/mm	288°C, 10S	≥1.05	1.42
热应力 Thermal stress	S	288°C, solder dip	> 10	180 s No delamination
弯曲强度 Flexural Strength	N/mm ²	经向LW	≥415	580
		纬向CW	≥345	475
燃烧性 Flammability	—	E 24/125	UL94V-0	V-0
表面电阻 Surface Resistivity	MΩ	After moisture	≥1.0×10 ⁴	5.21×10 ⁷
体积电阻 Volume Resistivity	MΩ·cm	After moisture	≥1.0×10 ⁶	5.10×10 ⁸
介电常数 Dielectric Constant	—	1 MHz C 24/23/50	≤5.4	4.6
介质损耗角正切 Loss Tangent	—	1 MHz C 24/23/50	≤0.035	0.015
耐电弧 Arc Resistance	S	D48/50+D0.5/23	≥60	120
击穿电压 Dielectric Breakdown	KV	D48/50+D0.5/23	≥40	57
吸水率 Moisture Absorption	%	D24/23	≤0.8	0.16
热分解温度 Td	°C	Weight Loss 5%	≥325	358
T288 (不覆铜)	min	TMA	≥5	30
Z-CTE /50 - 260°C	%	TMA	≤4.0	3.5
相比漏电起痕指数 CTI	V	IEC-60112	175~250	200
卤素含量 Halogen content	CL	EDX-GP	≤900	310
	Br		≤900	30
	CL+Br		≤1500	350

Specimen Thickness : 1.6mm ;

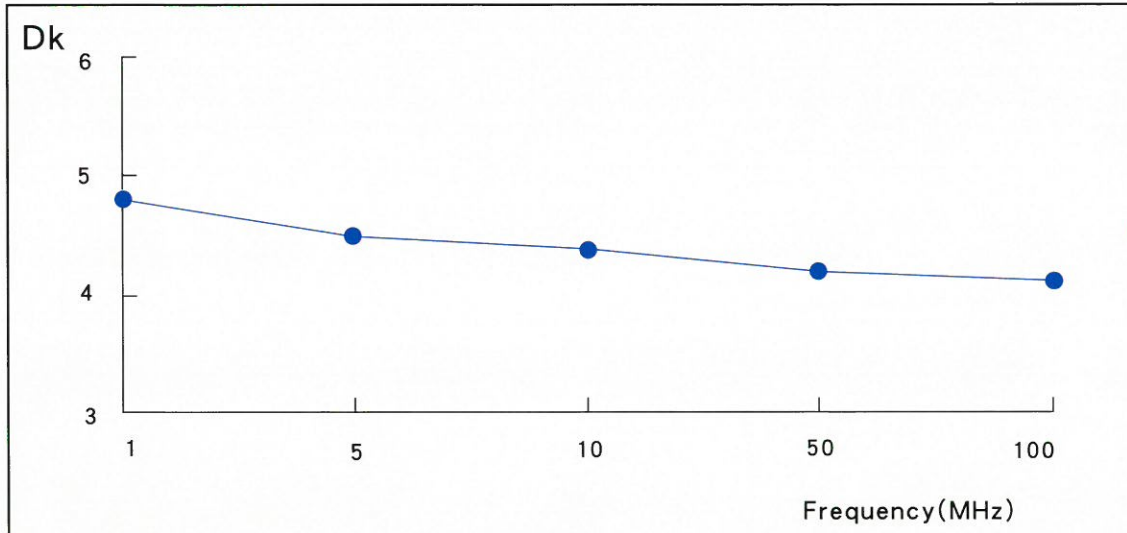
Explanation: C: Humidity conditioning;
E: Temperature conditioning ;

D: Immersion conditioning in distilled water ;

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◆ 介电常数 / Dielectric constant



◆ 使用建议 / Suggestion for use

1、使用前请进行烘板处理：150 °C、2h。

Please baking the Laminate at 150 °C、2 hours before using .

2、由于层间结合力较常规 FR-4 差，钻孔加工时请注意。

钻孔参数主要取决于孔的大小、内层厚度、层数、铜箔厚度和叠层厚度。

以典型的 0.4~1.0mm 钻嘴孔径为例，其建议钻孔参数如下：

钻头转速：45~105 KRPM，进刀速度：50~150 IPM

缩刀速度：500~1000 IPM，建议使用次数：1500 HITS

叠层高度：≤2pnl(2~6layers), 1pnl(≥8layers)

覆层材料：0.2mm Aluminum

Please pay attention to the machining for the interbedded energy is lower than the normal FR-4 .

Drilling parameters are mainly dependent on hole size, layer thickness, layer number, copper thickness and stack height. The following drilling parameters are for reference only. Typical drilling parameters for 0.4~1.0 mm drills are as follows:

Spindle speed: 45~105 KRPM

Feed rate: 50~150 IPM

Retract rate: 500~1000 IPM

Sug. hit count: 1500 HITS

Stack height: ≤2pnl(2~6layers), 1pnl(≥8layers)

Entry Material: 0.2mm Aluminum

◆ 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"

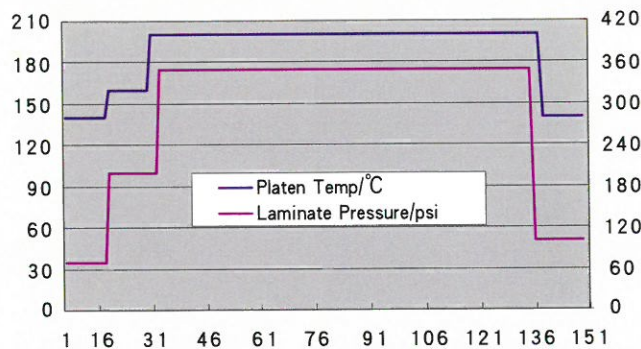
※ Other sheet size and thickness could be available upon request

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prepreg type	Resin Content(%)		GelTime (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	3	105±20	30±3	0.227	8.93	0.023	0.90
	50	3	105±20	29±3	0.217	8.41	0.022	0.85
	48	3	110±20	28±3	0.206	8.11	0.020	0.8
7628	45	3	110±20	24±3	0.192	7.56	0.019	0.75
	43	3	110±20	22±3	0.183	7.20	0.018	0.7
1506	48	3	110±20	29±3	0.162	6.38	0.017	0.65
	45	3	110±20	28±3	0.151	5.94	0.015	0.6
	43	3	110±20	25±3	0.145	5.71	0.015	0.6
2116	58	3	110±20	35±3	0.134	5.28	0.014	0.55
	57	3	110±20	35±3	0.13	5.12	0.013	0.5
	55	3	110±20	33±3	0.123	4.84	0.013	0.5
	53	3	110±20	31±3	0.117	4.61	0.011	0.45
	50	3	110±20	29±3	0.108	4.25	0.011	0.45
1080	68	3	110±20	44±3	0.084	3.31	0.008	0.3
	65	3	110±20	42±3	0.076	2.99	0.008	0.3
	63	3	110±20	39±3	0.071	2.80	0.008	0.3
	60	3	110±20	37±3	0.065	2.56	0.008	0.3

建议压制程式: Suggest cycle



一般建议料温 70°C~130°C 的升温速率为 1.5~2.3°C/min, 同时料温 180°C 以上维持 60min 为宜;

Commonly suggest the heat up rate of the material Temp from 70°C to 130°C is 1.5~2.3°C/min, and the material Temp 180°C above may aswell keep 60min appropriate .

储存条件: 温度 ≤ 20°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 ≤ 20°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.

