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HA30 Thermal conductivity CEM-3

特性/ Features

良好的导热性能，热导率 $\geq 1.0W/m.K$

Excellent thermal conductivity, $\geq 1.0W/m.K$

优异的耐热性能，适应无铅制程

Excellent solder heat endurance, Lead-free compatible CEM-3 laminate

基材白色，不透明，遮光性好

White and opaque with good color-change resistance

优秀的机械加工性

Excellent mechanical processability

应用领域/ Applications

LED背光源、户外照明、汽车电子等（见下图）

LED backlight module、 outdoor Lighting、 Automotive electronics (refer to figure)

主要特性 / General properties

检测项目 Item	单位 Unit	检测条件 Test Condition	规范值 Spec	类型1 Type1	类型2 Type2
热导率 Thermal Conductivity	W/ m.K	ASTM D5470 Hot Plate	≥ 1.0	1.02	1.51
玻璃化转变温度Tg	°C	DSC	≥ 110	120	120
剥离强度 1oz Peel Strength	N/mm	288°C, 10S	≥ 1.05	1.56	1.53
热应力 Thermal stress	S	288°C, solder dip	> 10	60s No delamination	60s No delamination
弯曲强度 Flexural Strength	N/mm ²	经向LW	≥ 276	326	326
		纬向CW	≥ 186	235	235
燃烧性Flammability	—	E 24/125	UL94V-0	V-0	V-0
表面电阻 Surface Resistivity	MΩ	After moisture	$\geq 1.0 \times 10^4$	4.62×10^6	4.62×10^6
体积电阻 Volume Resistivity	MΩ.cm	After moisture	$\geq 1.0 \times 10^6$	3.76×10^8	3.76×10^8
介电常数 Dielectric Constant	—	1MHZ C 24/23/50	—	5.1	5.6
介质损耗角正切 Loss Tangent	—	1MHZ C 24/23/50	≤ 0.035	0.019	0.019
耐电弧Arc Resistance	S	D48/50+D0.5/23	≥ 60	128	128
击穿电压 Dielectric Breakdown	KV	IPC-TM-650 2.5.2.6 D48/50+D0.5/23	≥ 40	60	60
吸水率 Moisture Absorption	%	D24/23	≤ 0.5	0.35	0.35
CTI	V	IEC-60112	≥ 600	600	600

Specimen Thickness : 1.6mm ;

Explanation: C: Humidity conditioning;

D: Immersion conditioning in distilled water ;

E: Temperature conditioning ;