

HA30 Thermal conductivity CEM-3

特性/ Features

良好的导热性能，热导率 $\geq 1.0\text{W}/\text{m}\cdot\text{K}$

Excellent thermal conductivity, $\geq 1.0\text{W}/\text{m}\cdot\text{K}$

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、ourdoor 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	典型值 Typical Value
热导率 Thermal Conductivity	W/ m·K	激光法 (ASTM E1461)	≥ 1.0	1.03
玻璃化转变温度 Tg	°C	DSC	≥ 120	122
剥离强度 1oz Peel Strength	N/mm	288°C, 10S	≥ 1.05	1.32
热应力 Thermal stress	S	288°C, solder dip	> 10	60s No delamination
弯曲强度 Flexural Strength	N/mm ²	经向 LW	≥ 276	326
		纬向 CW	≥ 186	235
燃烧性 Flammability	—	E 24/125	UL94V-0	V-0
表面电阻 Surface Resistivity	MΩ	After moisture	$\geq 1.0 \times 10^4$	4.62×10^6
体积电阻 Volume Resistivity	MΩ·cm	After moisture	$\geq 1.0 \times 10^6$	3.76×10^8
介电常数 Dielectric Constant	—	1 MHZ C 24/23/50	≤ 5.4	5.2
介质损耗角正切 Loss Tangent	—	1 MHZ C 24/23/50	≤ 0.035	0.019
耐电弧 Arc Resistance	S	D48/50+D0.5/23	≥ 60	128
击穿电压 Dielectric Breakdown	KV	D48/50+D0.5/23	≥ 40	60
吸水率 Moisture Absorption	%	D24/23	≤ 0.8	0.45

Specimen Thickness : 1.6mm ;

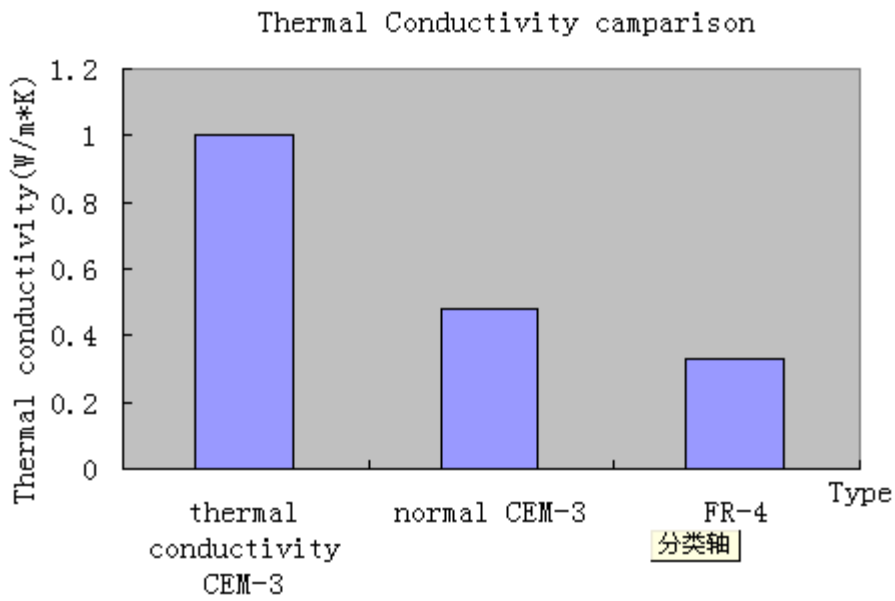
Explanation: C: Humidity conditioning;

D: Immersion conditioning in distilled water ;

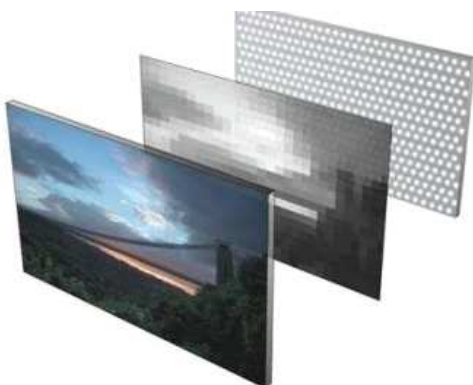
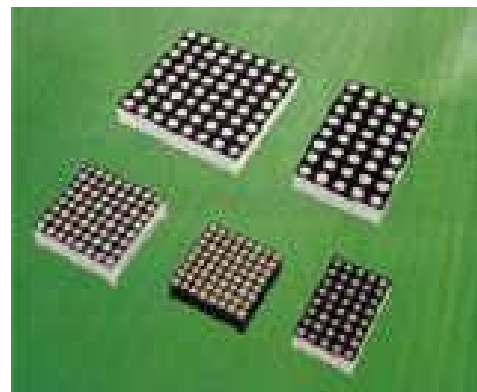
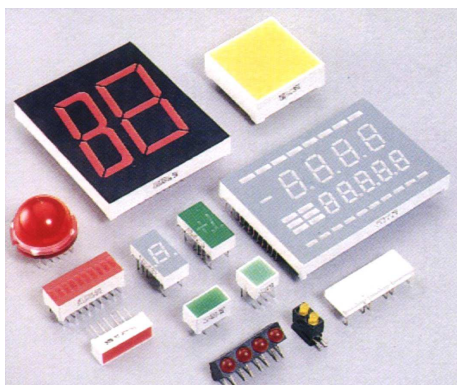
E: Temperature conditioning ;

导热 CEM-3 和其他材料热导率比较

Thermal Conductivity comparison



导热 CEM-3 主要应用 Applications



产品系列 / Purchasing information

厚度 Thickness	铜箔 Copper foil	标准尺寸 Standard size
0.6~3.2mm	12um ~ 105um	37"×49"、41"×49"、43"×49"

※ any specific inquiry could be available upon request