

KB-6168 Tg180 FR-4

覆铜箔环氧玻纤布层压板

特点 Features

- Tg 180°C (DSC 测试), 低 Z-轴 CTE 值
- 熱裂解温度高
- 優良的耐熱性, 能滿足無鉛制程要求
- 符合 IPC-4101B/126 的規範要求
- 非雙氰胺固化體系, 含填料
- 良好的耐金屬離子遷移性
- 180°C (By DSC), low Z-axis expansion
- High Thermal Delamination
- Excellent heat resistance and appropriate for lead-free assembly
- IPC-4101B/126 specification is applicable .
- Dicy -free and filler
- ANTI-CAF

General Properties 一般特性

Item	Unit	Test Method (IPC-TM-650)	Test Condition	Spec	Typical Value	
Peel Strength (1OZ)	kgf/cm	2.4.8	125°C	AABUS	1.30	
			Float 288°C/ 10Sec	AABUS	1.25	
Flammability	Rating	UL94	E-24/23	UL94 V-0	V-0	
Glass Transition (Tg)	°C	2.4.25	E-2/105 DSC	180±5	180	
Surface Resistance	MΩ	2.5.17.1	C-96/35/90	≥1.0×10 ⁴	1.0×10 ⁷	
Volume Resistance	MΩ-cm	2.5.17.1	C-96/35/90	≥1.0×10 ⁶	1.0×10 ⁹	
Dielectric breakdown	KV	2.5.6	D-48/50+D0.5/23	≥40	72	
Dielectric strength	Kv/mm	2.5.6.2	D-48/50+D0.5/23	≥29	46	
Dielectric Constant	—	2.5.5.2	Etched/@1 MHZ	≤5.4	4.5	
Loss Tangent	—	2.5.5.2	Etched/@1 MHZ	≤0.035	0.019	
CAF	%	-	85%,85°C,50V	≥1000	1000	
Moisture Absorption	%	2.6.2.1	D-24/23	≤0.35(min0.51)	0.14	
				≤0.80(max0.51)	0.26	
Flexural Strength	N/mm ²	2.4.4	Warp	≥415	596	
			Fill	≥345	496	
Arc Resistance	Sec	2.5.1	D-48/50+D0.5/23	≥60	123	
CTE	Z-Axis Expansion	ppm/°C	2.4.24	E-2/105 TMA	≤60/300	
					≤3.0	
	X/Y-Axis Expansion	ppm/°C	2.4.24	---	AABUS	12
				----	AABUS	13
TD	°C	2.3.40	TGA	≥340	359	
T-260	min	---	TMA	≥30	55	
T-288	min	----	TMA	≥15	30	
CTI	V	IEC 112	Etched/0.1% NH ₄ Cl	≥175	175	

Remarks: Specimen Thickness: 1.6 mm

样品厚度: 1.6 mm

A= Maintain original shape, do not make handling 保持原样, 不作处理

C= Temperature and humidity conditioning 恒温恒湿的空气中处理

D= Temperature conditioning immersion in distilled water. 恒温的水中处理

E=Temperature conditioning 恒温空气中处理

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环氧玻纤布覆铜层压板

Other data for reference 其他數據(僅供參考)

Item(項目)		Unit(單位)	Typical Value(典型值)
Youngs modulus 揚氏模量	Warp	Million psi	3.6
	Fill		3.1
Taylors modulus 泰勒模量	Warp	Million psi	3.3
	Fill		3.1
Poissons ratio 泊松比	Warp	--	0.12
	Fill		0.11
Tensil strength 抗張強度	Warp	N/mm ²	385
	Fill		265
Dk 介電常數	1MHZ	--	4.4
	1GHZ		4.2
	2GHZ		3.7
	5GHZ		3.7
	10GHZ		3.7
Df 介質損耗	1MHZ	---	0.018
	1GHZ		0.021
	2GHZ		0.022
	5GHZ		0.022
	10GHZ		0.023
Thermal Shock 冷熱衝擊	-40~125°C	Cycles	Pass

应用领域 // Applications

- 高层线路板,适用于计算机及外围设备、通讯设备等
High layer PCB, Suitable for Computer, communication equipment, etc.

Purchasing Information / 采购信息

Base colour 基板颜色	Thickness 厚度	Copper Cladding 铜箔厚度	Regular Size 常规尺寸
黄色自然色 Yellow nature	0.05mm ~ 3.2mm	18 μ m/35 μ m 70 μ m/105 μ m	1092*1245mm (43 " *49 ") 940*1245mm (37 " *49 ") 1041*1245mm (41 " *49 ")

Note: Other sheet size and thickness could be available upon request.