

KB-6167 Tg170 FR-4

覆铜箔环氧玻纤布层压板

特点 Features

- Tg 170°C (DSC 測試), 低 Z-軸 CTE 值
- 熱裂解溫度高
- 優良的耐熱性, 能滿足無鉛制程要求
- 符合 IPC-4101B/129 的規範要求
- 非雙氰胺固化體系, 不含填料
- 良好的耐金屬離子遷移性
- 170°C (By DSC), low Z-axis expansion
- High Thermal Delamination
- Excellent heat resistance and appropriate for lead-free assembly
- IPC-4101B/129 specification is applicable .
- Dicy-free and no 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	≥170	178	
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	70	
Dielectric strength	Kv/mm	2.5.6.2	D-48/50+D0.5/23	≥29	44	
Dielectric Constant	—	2.5.5.2	Etched/@1 MHZ	≤5.4	4.5	
Loss Tangent	—	2.5.5.2	Etched/@1 MHZ	≤0.035	0.018	
CAF	%	-	85%,85°C,50V	≥1000	1000	
Moisture Absorption	%	2.6.2.1	D-24/23	≤0.35(min0.51)	0.15	
				≤0.80(max0.51)	0.25	
Flexural Strength	N/mm ²	2.4.4	Warp Fill	≥415	589	
				≥345	456	
Arc Resistance	Sec	2.5.1	D-48/50+D0.5/23	≥60	125	
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	11(PRE TG)
					----	AABUS
TD	°C	2.3.40	TGA	≥340	357	
T-260	min	---	TMA	≥30	50	
T-288	min	----	TMA	≥15	30	
CTI	V	IEC 112	Etched/0.1% NH ₄ Cl	≥175	200	

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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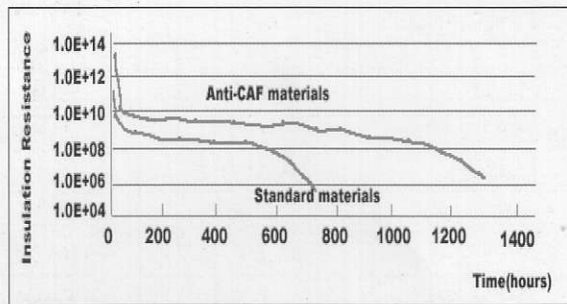
环氧玻纤布覆铜层压板

Other data for reference 其他數據(僅供參考)

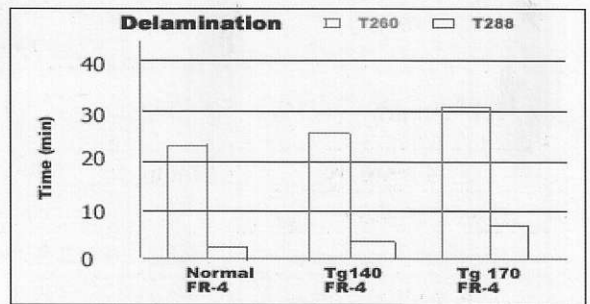
Item		Unit	Typical Value	Item		Unit	Typical Value
Youngs modulus	Warp	Million	3.5	Poissions ratio	Warp	--	0.13
	Fill	psi	3		Fill		
Tailors modulus	Warp	Million	3.2	Tensil strength	Warp	N/mm ²	380
	Fill	psi	3		Fill		

Speciality Chart 板材特性图

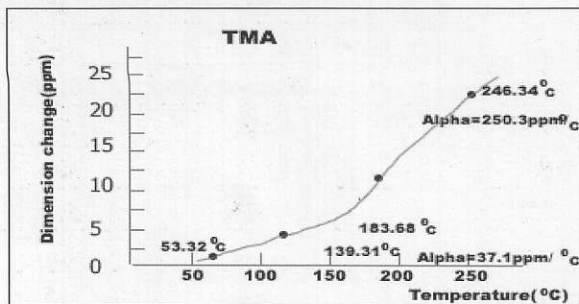
CAF 耐离子迁移



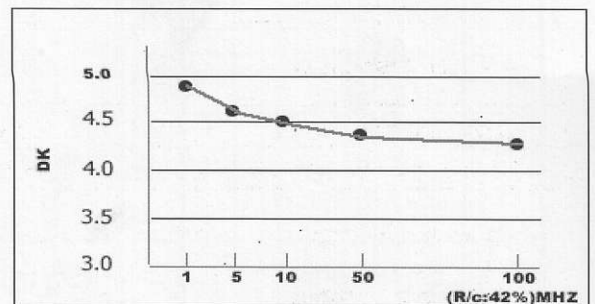
Delamination 分层时间 (test by TMA)



CTE Z轴热膨胀系数 (test by TMA)



Dielectric constant 介电常数



应用领域/Applications

- 计算机及外围设备、通讯设备、仪器仪表、办公自动设备等
Computer, communication equipment instrumentation, OA 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	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 ")