

ETL-XPC-204

(N TYPE)

(For FR-1 High Tracking Laminate)

■特性

- 尺寸變化、彎曲度小
- 優越之電氣火災安全性
- 符合 UL746E DSR (▲ 標誌)
- 符合 RoHS 法規要求
- 中國製造

■CHARACTERS

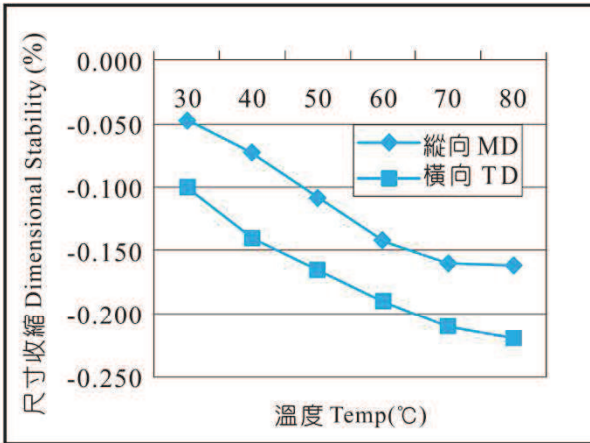
- Dimensional change and warpage are small.
- Electrical fire safety is excellent.
- Meet UL746E Direct Support Requirement (▲ MARK).
- Conform to the claim of RoHS.
- Made in China.

■一般物性 GENERAL PROPERTIES

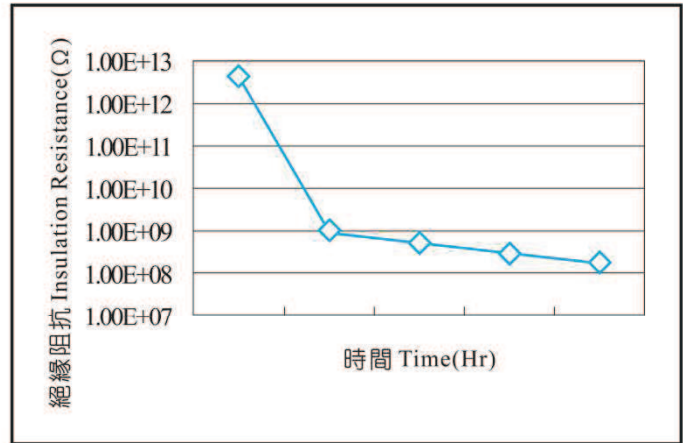
試驗項目 Test Item	單位 Unit	處理條件 Condition	品管規格值 Guarantee Value	實測標準值 Standard Value	
體積阻抗 Volume Resistivity	Ω-cm	C-96/20/65	Above 5×10^{12}	$1 \times 10^{13} \sim 1 \times 10^{14}$	
		C-96/20/65+C-96/40/90	Above 5×10^{11}	$1 \times 10^{12} \sim 1 \times 10^{13}$	
表面阻抗 Surface Resistance	Ω	接著劑面 Adhesive Surface	C-96/20/65	Above 1×10^{11}	$5 \times 10^{11} \sim 5 \times 10^{12}$
		積層板面 Laminate Surface	C-96/20/65+C-96/40/90	Above 1×10^{10}	$1 \times 10^{11} \sim 1 \times 10^{12}$
			C-96/20/65	Above 1×10^{10}	$5 \times 10^{10} \sim 1 \times 10^{12}$
			C-96/20/65+C-96/40/90	Above 1×10^8	$5 \times 10^8 \sim 5 \times 10^9$
絕緣阻抗 Insulation Resistance	Ω	C-96/20/65	Above 1×10^{11}	$1 \times 10^{11} \sim 1 \times 10^{12}$	
		C-96/20/65+D-2/100	Above 1×10^8	$5 \times 10^8 \sim 5 \times 10^9$	
介電常數(1 MHz) Dielectric Constant	—	C-96/20/65	Less than 5.3	4.1~4.6	
		C-96/20/65 + D-24/23	Less than 5.6	4.8~5.2	
散發因子(1 MHz) Dissipation Factor	—	C-96/20/65	Less than 0.045	0.030~0.040	
		C-96/20/65+D-24/23	Less than 0.055	0.046~0.052	
焊錫耐熱性(260°C) Solder Heat Resistance	sec	A	Above 10	20~35	
銅箔剝離強度 Peel Strength	kgf/cm	A	Above 1.5	1.80~2.20	
		S (260°C, 10 sec)	Above 1.5	1.80~2.20	
彎曲強度 Flexural Strength	kgf/mm ²	A	Above 10	13~16	
吸水率 Water Absorption	%	E-24/50+D-24/23	Less than 1.2	0.60~0.80	
耐熱性 Heat Resistance	—	A	190°C 30 min no blistering	190~195°C 30 min no blistering	
難燃性 Flame Resistance (UL 94 method)	sec	A& E-168/70	Less than $\pi=5$ Max=10	94 V-0	
耐藥品性 Alkali Resistance	—	Immersion in 3% NaOH 40°C (3 mins)	無異常 No abnormality	無異常 No abnormality	
加工沖孔性 Punchability	—	A	Suitable temp. 50~70 °C	GOOD	
耐漏電破壞性 CTI (IEC 60112)	Volt	A	≥ 600	≥ 600	

◎以上數據試片厚度 1.6mm (Note : Test specimen thickness is 1.6mm)

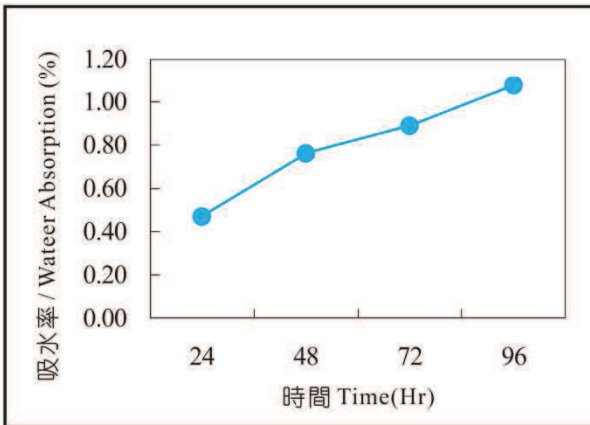
■ 沖孔後尺寸變化
Dimensional Change



■ 絕緣阻抗經時試驗
Insulation Resistance



■ 板材吸水率經時試驗
Moisture Absorption



■ 沖孔後孔徑收縮
Punched Hole Shrinkage

