



ETL-CEM1-502

ETL-CEM1-502(Y TYPE)

■特性

- 尺寸變化、彎曲度小
- 優越之電氣火災安全性
- IEC 60112 耐漏電破壞試驗可達 600V 以上
- 符合 UL 746E 規範及 RoHS 法規要求
- 適用於銀銅貫孔製程與 SMT 製程或噴錫製程

■CHARACTERS

- Dimensional change and warpage are small
- Electrical fire safety is excellent
- IEC 60112 Comparative Tracking Index 600+Volts
- Meet UL 746E and conform to the request of RoHS
- Suitable in silver/copper paste through hole process and SMT process or HALS

■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 X 10 ¹³	1 X 10 ¹⁴ ~1 X 10 ¹⁵
			C-96/20/65+C-96/40/90	Above 5 X 10 ¹²	1 X 10 ¹³ ~1 X 10 ¹⁴
表面阻抗 Surface Resistance	接著劑面 Adhesive Surface	Ω	C-96/20/65	Above 1 X 10 ¹²	5 X 10 ¹² ~5 X 10 ¹³
			C-96/20/65+C-96/40/90	Above 1 X 10 ¹¹	1 X 10 ¹² ~1 X 10 ¹³
	積層板面 Laminate Surface		C-96/20/65	Above 1 X 10 ¹²	5 X 10 ¹² ~5 X 10 ¹³
			C-96/20/65+C-96/40/90	Above 1 X 10 ¹¹	1 X 10 ¹² ~1 X 10 ¹³
絕緣阻抗 Insulation Resistance		Ω	C-96/20/65	Above 1 X 10 ¹²	1 X 10 ¹³ ~1 X 10 ¹⁴
			C-96/20/65+D-2/100	Above 1 X 10 ¹⁰	5 X 10 ¹² ~5 X 10 ¹³
介電常數(1 MHz) Dielectric Constant		—	C-96/20/65	Less than 4.8	4.1~4.6
			C-96/20/65 +D-48/50	Less than 5.2	4.8~5.2
散發因子(1 MHz) Dissipation Factor		—	C-96/20/65	Less than 0.035	0.030~0.035
			C-96/20/65+D-48/50	Less than 0.045	0.033~0.038
焊錫耐熱性(260°C) Solder Heat Resistance		sec	A	Above 20	Above 120
焊錫耐熱性(288°C) Solder Heat Resistance		sec	A	Above 10	20~40
銅箔剝離強度 Peel Strength	銅箔(35μm) Copper Foil	kgf/cm	A	Above 1.5	2.00~2.20
			S	Above 1.5	2.00~2.20
彎曲強度 Flexural Strength		kgf/mm ²	A	Above 20.4	28~35
吸水率 Water Absorption		%	E-24/50+D-24/23	Less than 0.5	0.10~0.20
耐熱性 Heat Resistance		—	A	190°C 30 min no blistering	220°C 30 min no blistering
難燃性 Flame Resistance (UL 94 method)		sec	A& E-168/70	Less than π=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)