



• ETL-CEM1-502 (W TYPE)

• 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

■ 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.

■ 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^{13}	$1 \times 10^{14} \sim 1 \times 10^{15}$
			C-96/20/65+C-96/40/90	Above 5×10^{12}	$1 \times 10^{13} \sim 1 \times 10^{14}$
表面阻抗 Surface Resistance	接著劑面 Adhesive Surface	Ω	C-96/20/65	Above 1×10^{12}	$5 \times 10^{12} \sim 5 \times 10^{13}$
	積層板面 Laminate Surface		C-96/20/65+C-96/40/90	Above 1×10^{11}	$1 \times 10^{12} \sim 1 \times 10^{13}$
			C-96/20/65	Above 1×10^{12}	$5 \times 10^{12} \sim 5 \times 10^{13}$
	C-96/20/65+C-96/40/90		Above 1×10^{11}	$1 \times 10^{12} \sim 1 \times 10^{13}$	
絕緣阻抗 Insulation Resistance		Ω	C-96/20/65	Above 5×10^{12}	$1 \times 10^{13} \sim 1 \times 10^{14}$
			C-96/20/65+D-2/100	Above 5×10^{10}	$5 \times 10^{12} \sim 5 \times 10^{13}$
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-24/23	Less than 5.2	4.5~5.0
散發因子(1 MHz) Dissipation Factor		—	C-96/20/65	Less than 0.035	0.025~0.030
			C-96/20/65+D-24/23	Less than 0.045	0.030~0.035
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 (260°C, 20 sec)	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 0.30	0.10~0.20
耐熱性 Heat Resistance		—	A	190°C /30 min No blistering	220°C /30 min No blistering
				150°C /60 min No blistering	150°C /60 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)