

For high current applications thick copper glass composite circuit board materials

Double-sided copper clad **R-1786**

High current (Thick copper foil type)

Tracking resistance

High reliability

Proposals 提案

- Compatible with high current applications
-Thick copper foil used (70 μm)
- CEM-3 grade material with high reliability
-Tracking resistance CTI ≥ 600V

Applications 用途

Power supply system board
Inverter, converter board
Ex: power conditioner and battery of the solar power

Tracking resistance

Pattern method (circuit method)	Product name / number	IEC method IEC法	Appearance of the test piece	
			Standard state	After test
175	CEM-3 R-1786	600		
—	Conventional FR-4 R-1705	240		

● Test method 試験方法

Test piece

Drop out
30~40mm
1mm
Circuit interval

Test piece (Overall etching)

Drop out
60°
±0.1mm
30~40mm
1mm
Circuit interval

Drip 50 drops electrolyte (0.1% aqueous solution of ammonium chloride) towards the central circuit current of 1.0A flows in the voltage of 100V ~ 600V (25V interval). Measure the voltage current flows for more than 2 seconds.

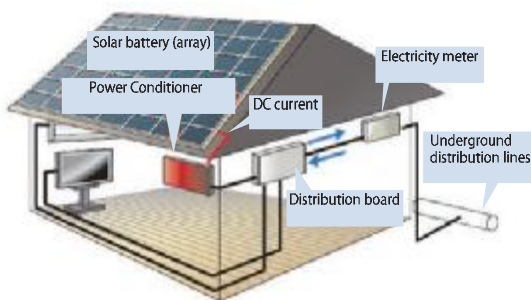
General properties 一般特性

Item 項目	Condition 条件	Unit 单位	R-1786
Solder heat resistance	260°C solder float for 2min	-	No abnormality
Heat resistance 耐熱性	1oz A	-	240°C 60min
Dielectric constant (Dk)* 比誘電率	C-96/20/65	-	4.5
	C-96/20/65+D-24/23		4.5
Dissipation factor (Df)* 誘電正接	C-96/20/65	-	0.015
	C-96/20/65+D-24/23		0.015
Volume resistivity 体積抵抗率	C-96/20/65	MΩ·m	1 × 10 ⁸
	C-96/20/65+C-96/40/90		5 × 10 ⁷
Surface resistivity 表面抵抗	C-96/20/65	MΩ	3 × 10 ⁸
	C-96/20/65+C-96/40/90		1 × 10 ⁸
Insulation resistance 絶縁抵抗	C-96/20/65	MΩ	5 × 10 ⁸
	C-96/20/65+D-2/100		1 × 10 ⁷
Water absorption	E-24/50+D-24/23	%	0.08
Flexural strength	Fill 30°方向	A	N/mm ² 280
		A	2.2
Peel strength	2oz	260°C solder float for 20sec	kN/m 2.1
		-	-
Alkali resistance	dipping (3min)	-	No abnormality
Flammability	A+E-168/70	-	94V-0

The sample thickness is 1.6mm

<Test method 試験方法>
JIS C6481 ※ IPC TM-650 2.5.5.9

General configuration of solar power (personal residence)



The above data is actual values and not guaranteed values. 上記データ

More Product line from Panasonic 関連商品

Please see the page for "Notes before you use"

- For digital-home appliance glass composite circuit board materials
- For digital-home appliance & LED lightings paper phenolic circuit board materials