

R-CAES (Halogen-Free Coverlay)



FELIOS

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Flexible CCL Group
Advanced Material Division
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K.I.T.O

R-CAES (Halogen-Free Coverlay)

Feature

· *Excellent Peel Strength (0.8N/mm)*

· *Excellent Electrical Insulation*

· *Adhesive Type :Halogen Free*

1 - Standard characteristics

Property

Teat Item		UNIT	R-CAES	Test Method
Tg (Adhesive Layer only)			85	DMA
			75	TMA
CTE (Z) : 1 (Adhesive Layer only)		ppm/	60	TMA
Chemical Resistance	2mol/L NaOH	5min	PASS	JIS C 6471
	2mol/L HCL	5min	PASS	

The above data are not guaranteed performance though they are actual measurement value.

Construction

PI : 12.5 μ m
Adhesive : 25 μ m

2- Standard characteristics

Property

Test Item	condition A	condition B	R-CAES	Competitor A (Halogen-Free)	Competitor B (Halogen-containing)
Peel Strength (N/mm)	Ordinary	A	0.80	0.35	0.88
	Solder process	288 ,5sec	0.83	0.39	0.80
Solder Resistance	Floating	288 ,60sec	OK	OK	OK
	Dip	320 ,10sec	OK	NG	OK
Electrical Insulation ()	L/S=50/50 μ m	85 ,85%,50V (1000rh)	7.0E+10	1.1E+10	1.2E+07
Flexibility (count)	IPC	EF12-25-12	>10,000,000	>10,000,000	800,000
Shelf Life	5 /3months after Departure		OK	OK	OK

The above data are not guaranteed performance though they are actual measurement value.

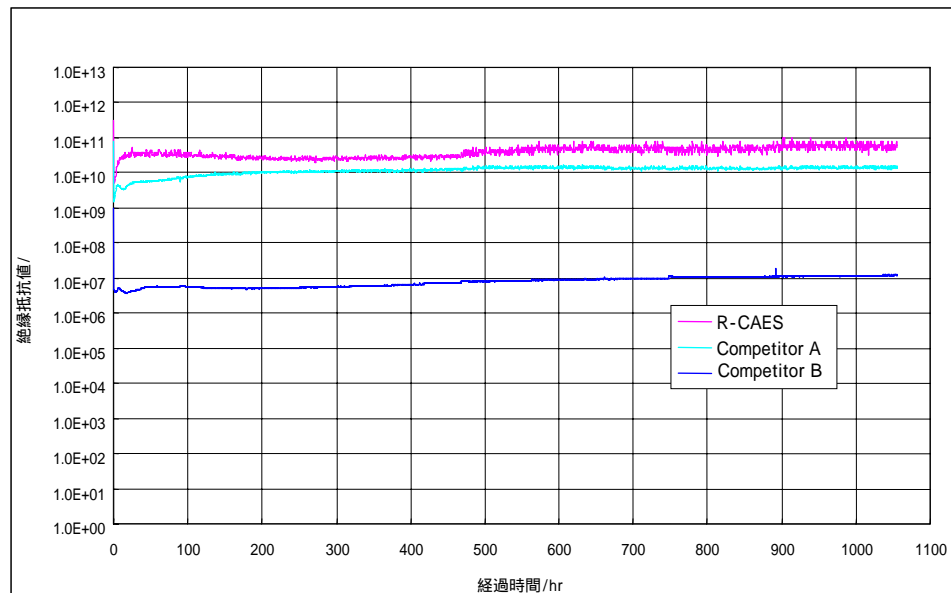
Construction

PI : 12.5 μ m
Adhesive : 25 μ m

3-Electrical insulation

Evaluation of Electrical insulation

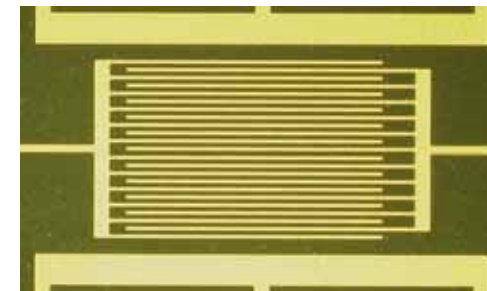
85 /85%/50V-1000hr



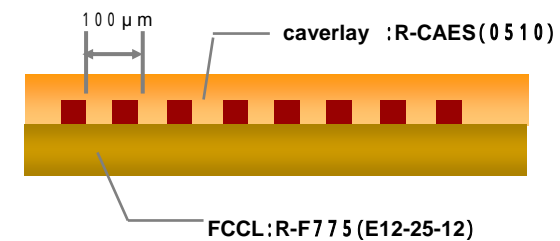
Evaluation condition 85 /85%/50V

Evaluation board

pitch pattern : 100 μm (50/50 μm)



Evaluation sample



4-Example of molding condition

