



Halogen-free

Laminate

R-1566S

Prepreg

R-1551S

Highly heat-resistant Halogen-free multi-layer circuit board materials

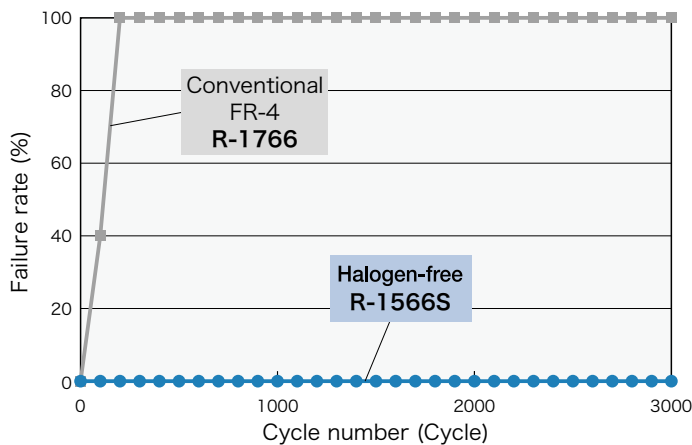
Better heat resistance than conventional Halogen-free material R-1566

Applications

Automotive

Automotive ECU, Automotive module, HEV/EV power control unit, DC/DC converter board, etc.

Through-hole reliability

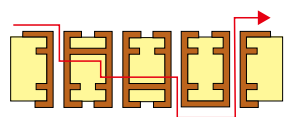


Condition

Cycle condition	-40°C (15min) ⇄ 160°C (15min)
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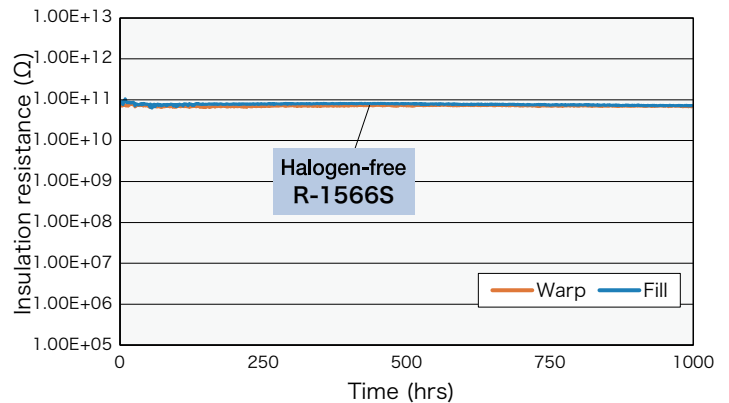
* Failure is over 10% changes of resistance
* 260°C Peak reflow x 3times as pretreatment

Construction



Through-hole reliability

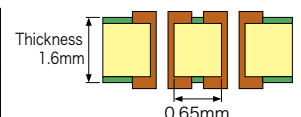
High voltage CAF evaluation



Condition

Pretreatment	260°C Peak reflow x 3times
Condition	85°C 85%RH DC 350V
Through-hole wall to wall distance	0.65mm

Construction



General properties

Item	Test method	Condition	Unit	Halogen-free R-1566S	Conventional Halogen-free R-1566(W)
Glass transition temp. (Tg)	DSC	A	°C	175	148
	TMA			170	145
Thermal decomposition temp.(Td)	TGA	A	°C	355	350
CTE z-axis	IPC-TM-650 2.4.24	A	ppm/°C	40	40
				180	180
T288(with copper)	IPC-TM-650 2.4.24.1	A	min	10	3
Peel strength	1oz(35μm) IPC-TM-650 2.4.8	A	kN/m	1.6	1.8
Flammability	UL Method	C-48/23/50	—	No certification	94V-0

The sample thickness is 0.8mm.

Our Halogen-free materials are based on JPCA-ES-01-2003 standard and others.

The above data are typical values and not guaranteed values.

Please see our website for Notes before you use.

industrial.panasonic.com/www/electronic-materials

Panasonic Industry R-1566S

Panasonic Industry Co., Ltd. Electronic Materials Business Division

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