



Halogen-free Multi-layer circuit board materials

ハロゲンフリー多層基板材料

Halogen-free

Laminate **R-1566** R-1566(W)*1 R-1566(WN)*2
Prepreg **R-1551** R-1551(W)*1 R-1551(WN)*2

*1 UV Shielding type *2 UV Shielding Heat resistance type

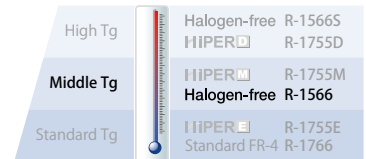
Applications 用途

Automotive component, Mobile phone, Amusement machine, Home appliance, Measuring instrument, Test equipment, Industry equipment (DC/DC converter) Etc.
車載機器、モバイル機器、携帯電話、アミューズメント機器、家電、計測機器、産業機器 (DC/DC コンバータ) など



Having many proven from car and mobile company with high reliability and halogen-free properties.

高い信頼性により車載機器やモバイル機器などに幅広く採用実績があり、環境への負荷を考慮したハロゲンフリー材料

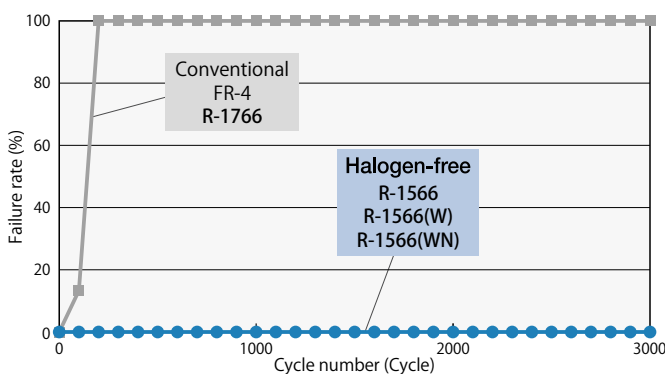


T_g (DSC)
148°C

T_d (TGA)
350°C

CTE z-axis
40ppm/°C

Through-hole reliability スルーホール導通信頼性

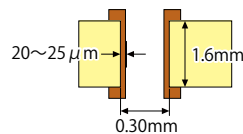


Condition

Cycle condition	-40°C (15min) ⇄ 150°C (15min)
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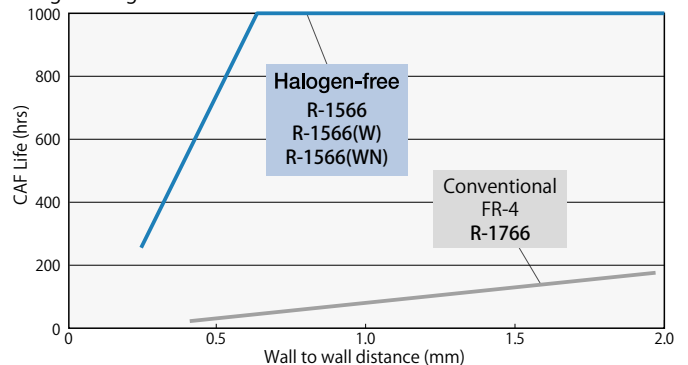
* Failure is over 10% changes of resistance

Construction



Insulation reliability 絶縁信頼性

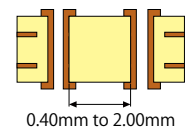
High voltage CAF evaluation



Condition

Pretreatment	260°C Peak reflow x 3times
Condition	85°C 85%RH DC1000V
Layer	4 layers
Core	1.1mm
Prepreg	#7628 1+1ply

Construction



General properties 一般特性

Item	Test method	Condition	Unit	Halogen-free R-1566 Standard type	Halogen-free R-1566(W) UV Shielding type	Halogen-free R-1566(WN) UV Shielding Heat resistance type	Conventional FR-4 R-1766
Glass transition temp.(T _g)	DSC	A	°C	148	148	148	140
Thermal decomposition temp.(T _d)	TGA	A	°C	350	350	355	315
CTE z-axis	IPC-TM-650 2.4.24	A	α1	40	40	40	65
			α2	180	180	180	270
T288(with copper)	IPC-TM-650 2.4.24.1	A	min	3	3	10	1
Peel strength	1oz(35 μm) IPC-TM-650 2.4.8	A	kN/m	1.8	1.8	1.8	2.0
Tracking resistance	IEC 60112	A	V	600>CTI≥400	600>CTI≥400	600>CTI≥400	250>CTI≥175

The sample thickness is 0.8mm.

Our Halogen-free materials are based on JPCA-ES-01-2003 standard and others. 当社ハロゲンフリー材料は、JPCA-ES-01-2003などの定義によるものです。The above data are typical values and not guaranteed values. 上記データは当社測定による代表値であり、保証値ではありません。

Please see the page for "Notes before you use" 商品のご採用に当たっての注意事項は こちら