



Halogen-free Low transmission loss Highly heat resistant Multi-layer circuit board materials

ハロゲンフリー低伝送損失・高耐熱多層基板材料

Halogen-free
MEGTRON2
Halogen-free
MEGTRON2E
Laminate R-1577 R-1577E
Prepreg R-1570 R-1570E

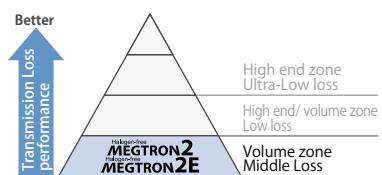
Applications 用途

ICT infrastructure equipment, Measuring instrument, Etc.
ICT インフラ機器、計測機器など



Halogen-free High Tg material suitable for large volume high speed data transmission.

ハロゲン系難燃剤などを含まない環境対応材で、ボリュームゾーンのサーバ・ルータなどの更なる高速化に対応

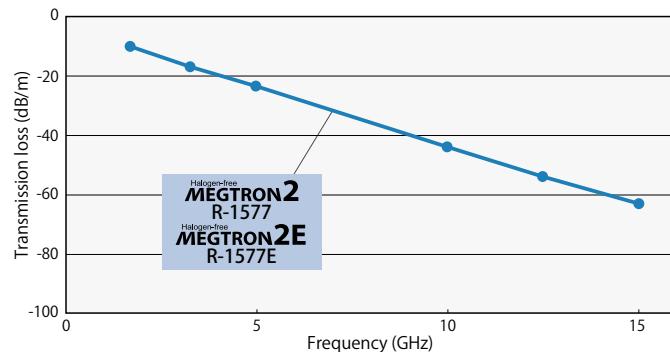


Dk 4.0 Df 0.013
@10GHz

Tg (DSC)
170°C

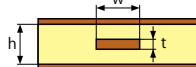
Halogen-free
Lead-free soldering

Frequency dependence by Transmission loss 伝送損失比較



Construction

Stripline



Trace width (w)	0.1mm
Trace thickness (t)	0.035mm
Dielectric thickness (h)	0.28mm
Core	0.13mm
Prepreg	0.06mm x 2ply
Line length	1m
Impedance	50Ω

Heat resistance of High Multi-layer 高多層耐熱性

Result

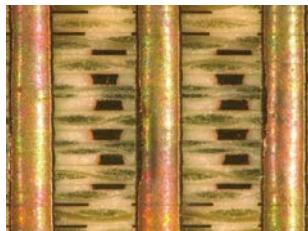
Drill diameter	φ 0.3mm		
Wall to wall distance	0.5mm	0.6mm	0.7mm
Halogen-free MEGTRON2	pass	pass	pass
Halogen-free MEGTRON2E	pass	pass	pass

Condition

260°C reflow x 10times

Construction

28 Layers
Board thickness: 3.8mm



General properties 一般特性

Item	Test method	Condition	Unit	Halogen-Free MEGTRON2 R-1577	Halogen-Free MEGTRON2E R-1577E
Glass transition temp.(Tg)	DSC	A	°C	170	173
CTE z-axis	α 1	IPC-TM-650 2.4.24	A	ppm/°C	34
	α 2				200
T288(with copper)	IPC-TM-650 2.4.24.1	A	min	25	25
Dielectric constant(Dk)	10GHz	IPC-TM-650 2.5.5.5	C-24/23/50	—	4.0
Dissipation factor(Df)					0.013
Peel strength	1oz(35 μm)	IPC-TM-650 2.4.8	A	kN/m	1.3

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。

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