



# Highly heat resistant Low CTE Multi-layer circuit board materials <High-Tg type>

## 高耐熱・低熱膨張多層基板材料 <High-Tgタイプ>

**HIPERV**  
Laminate R-1755V  
Prepreg R-1650V

### Applications 用途

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



Good for hybrid board with MEGTRON series. Standard loss material.  
スタンダード領域の伝送ロスを有しており、MEGTRON シリーズとのハイブリットが可能

Dk 4.4 Df 0.016  
@1GHz

Tg (DSC)  
173°C

T288 (with copper)  
20min

### ■ IST (Interconnect Stress Test)

#### ● Result

Sample No.	Reflow condition	HIPERV R-1755V
1	—	Over 1000 cycles OK
2	230°C x 3times	Over 1000 cycles OK
3	230°C x 6times	Over 1000 cycles OK
4	260°C x 3times	Over 1000 cycles OK
5	260°C x 6times	Over 1000 cycles OK

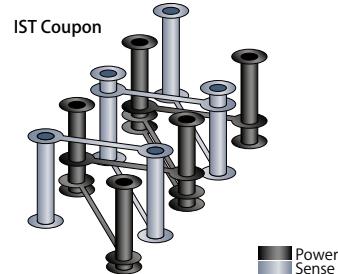
#### ● Condition

Pretreatment	Reflow
Cycle condition	25°C ⇄ 150°C (2min) ⇄ (3min)

\* Failure is over 10% changes of resistance

#### What is IST ?

Carrying out temperature cycling experiments 25°C ⇄ 150°C by electric heating to the power unit. By detecting the occurrence of deficiencies in the sense unit, evaluating the number of cycles to failure occurrences.



### ■ Solder heat resistance (float) はんだフロート耐熱性

#### ● Result

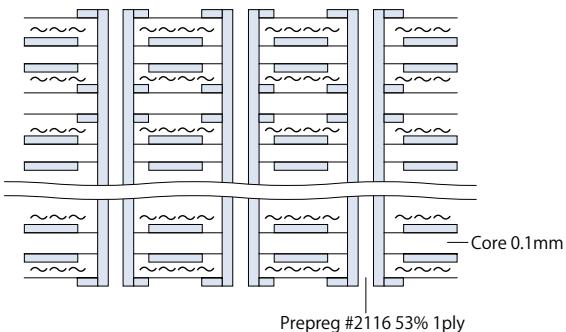
R-1755V : No abnormality of cross-sectional observation

#### ● Condition

288°C 10sec. Solder float 6 cycles

#### ● Construction

Board thickness	3.1mm
Layer count	24 layers
Drill diameter/Pitch	0.25 mm φ/0.76mm



### ■ General properties 一般特性

Item	Test method	Condition	Unit	HIPERV R-1755V
Glass transition temp.(Tg)	DSC	A	°C	173
CTE z-axis	α1	A	ppm/°C	44
	α2			255
T288 (with copper)	IPC-TM-650 2.4.24.1	A	min	20
Dielectric constant (Dk)	1GHz	IPC-TM-650 2.5.5.9	C-24/23/50	4.4
Dissipation factor (Df)				0.016
Peel strength	1oz(35 μm)	IPC-TM-650 2.4.8	A	kN/m
The sample thickness is 0.8mm.				1.5

The sample thickness is 0.8mm.

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

