

**Dk 3.36 Df 0.0029
@13GHz**

T_g (DMA) 250°C

**T320 (with copper)
>120min**



Halogen-free **MEGTRON6**

Laminate

R-537Y(N)* R-537Y(E)

Prepreg

R-527Y(N)* R-527Y(E)

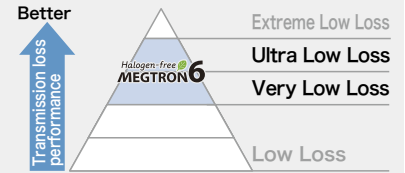
*Low Dk glass cloth type

Halogen-free ultra-low transmission loss multi-layer circuit board materials

The industry standard high-speed, ultra-low loss material.

Transmission loss is between MEGTRON6 R-5775(K)/R-5775(G) and MEGTRON7 R-578Y(N).

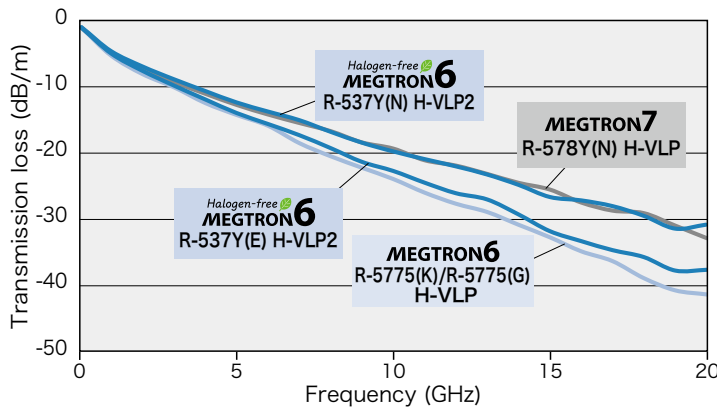
Excellent HDI and thermal performance.



Applications
Network / Wireless

ICT Infrastructure Equipment, High Speed Networking (High-End Server/Router, Optical Network, Switch), High-Layer-Count PCB

Frequency dependence by transmission loss



Heat resistance of high multi-layered

Result

Drill diameter	φ0.3mm	
Wall to wall distance	0.3mm	0.5mm
Halogen-free MEGTRON6 R-537Y(E)	pass	pass

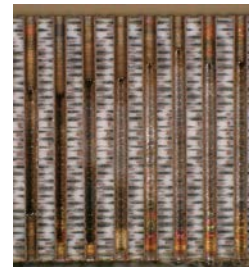
Condition

260°C reflow x 10times

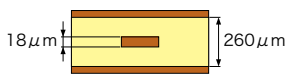
Construction

32 Layers

Board thickness: 4.5mm



Construction



Line length	200mm , 100mm
Line width	125μm
Impedance	50Ω
Inner Cu treatment	No-surface treatment
Core	0.13mm
Prepreg	#2116 56% x 1ply

General properties

Item	Test method	Condition	Unit	Halogen-free MEGTRON6 R-537Y(N) Low Dk glass cloth	Halogen-free MEGTRON6 R-537Y(E) E glass cloth	MEGTRON6 R-5775(K)/R-5775(G) E glass cloth	
T _g	DMA (1Hz)	A	°C	250	250	210*1	
CTE z-axis	α1/α2	IPC TM-650 2.4.24	ppm/°C	39/200	39/200	45/260	
T288(with copper)	IPC-TM-650 2.4.24.1	A	min	>120	>120	>120	
T320(with copper)				>120	>120	50	
Dk	13GHz	Balanced-type circular disk resonator method	C-24/23/50	-	3.36	3.66	3.62
Df					0.0029	0.0037	0.0046
Peel strength	1oz(35μm)	IPC-TM-650 2.4.8	A	kN/m	0.6*2	0.6*2	0.8*3

The sample thickness is 0.75mm.

*1 10Hz *2 H-VLP2 Copper *3 H-VLP Copper

Please see our website for Notes before you use.

industrial.panasonic.com/ww/electronic-materials

Panasonic Industry Halogen-free MEGTRON6

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

The above data are typical values and not guaranteed values.