Panasonic INDUSTRY

Dk 3.68 Df 0.0074 @13GHz

Tg(DSC) 176℃

T288 (with copper) 30min

Applications

Network/Wireless

ICT Infrastructure Equipment, Supercomputer, Measuring Instrument, Antenna, etc.

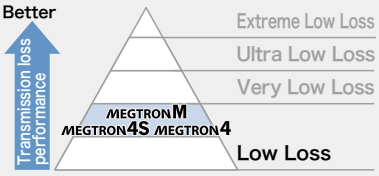
MEGTRON4 MEGTRON4S MEGTRONM

Laminate **R-5725** Laminate **R-5725S** Laminate **R-5735**

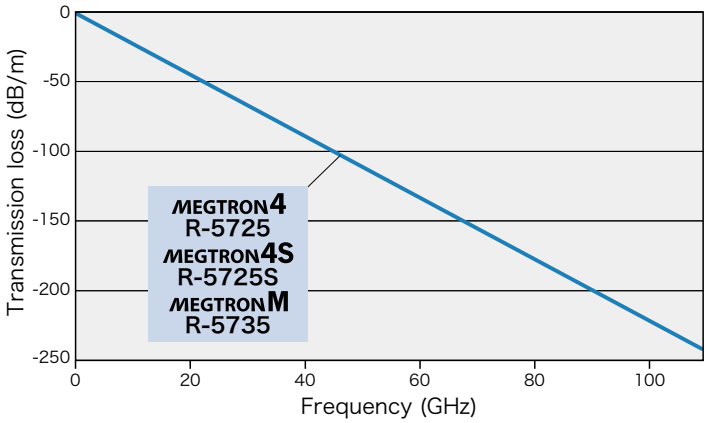
Prepreg **R-5620** Prepreg **R-5620S** Prepreg **R-5630**

Low transmission loss, highly heat-resistant multi-layer circuit board materials

Suitable for high-speed large-volume data transmission by servers and routers at high-end and volume designs.



Frequency dependence by transmission loss



Construction

Microstrip line

Measurement	2 port S-Parameter
Frequency	10MHz - 110GHz
De-embedded	TRL method
Measurement line	adjust to 50Ω(Zo)

Layer1: Signal Line (line width: 270μm, Cu thickness: 24μm)
Layer2: GND Plane (Cu thickness: 24μm)

Heat resistance of high multi-layered

Result

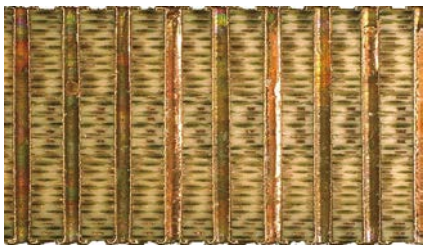
Drill diameter	ϕ0.3mm	
Wall to wall distance	0.6mm	0.7mm
MEGTRON4	pass	pass
MEGTRON4S	pass	pass
MEGTRONM	pass	pass

Condition

260℃ reflow x 10 times

Construction

28Layers
Board thickness: 3.8mm



General properties

Item		Test method	Condition	Unit	MEGTRON4 R-5725	MEGTRON4S R-5725S	MEGTRONM R-5735
Tg		DSC	A	℃	176	200	195
CTE z-axis	α1	IPC-TM-650 2.4.24	A	ppm/℃	35	32	31
	α2				265	250	240
T288(with copper)		IPC-TM-650 2.4.24.1	A	min	30	50	35
Dk	10-13GHz	Balanced-type circular disk resonator method	C-24/23/50	–	3.68 [13GHz]	3.8* [10GHz]	3.75 [13GHz]
Df					0.0074 [13GHz]	0.007* [10GHz]	0.0087 [13GHz]
Peel strength	1oz(35μm)	IPC-TM-650 2.4.8	A	kN/m	1.2 [ST]	1.4 [ST]	1.3 [ST]

The sample thickness is 0.8mm.
* Test method: IPC-TM-650 2.5.5.5

Please see our website for Notes before you use.

The above data are typical values and not guaranteed values.

industrial.panasonic.com/ww/electronic-materials

Panasonic Industry MEGTRON4

Panasonic Industry Co., Ltd. Electronic Materials Business Division