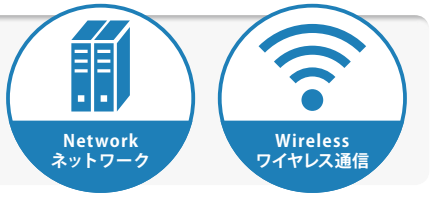
Low transmission loss Highly heat resistant Multi-layer circuit board materials
低伝送損失・高耐熱多層基板材料

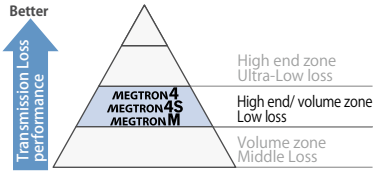
MEGTRON4 MEGTRON4S MEGTRONM
Laminate R-5725 R-5725S R-5735
Prepreg R-5620 R-5620S R-5630

Applications 用途

ICT infrastructure equipment, Supercomputer, Measuring instrument, Antenna, Etc.
ICT インフラ機器、スーパーコンピュータ、計測用機器、通信アンテナなど



Suitable for high-speed large-volume data transmission of server and router at high-end/ volume zone.
大容量データの伝送速度の高速化に対応。
高多層や基板加工時のリフロー工程に対応した耐熱性を向上 (MEGTRON4S/MEGTRON M)

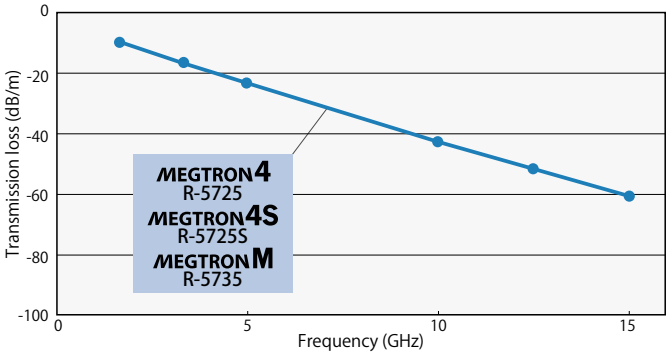


Dk 3.8 Df 0.007 @10GHz

Tg (DSC) 176℃

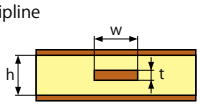
T288 (with copper) 30min

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

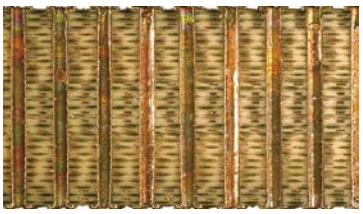
Drill diameter	ϕ0.3mm		
Wall to wall distance	0.5mm	0.6mm	0.7mm
MEGTRON4	Not pass	pass	pass
MEGTRON4S	pass	pass	pass
MEGTRONM	pass	pass	pass

● Condition

260℃ reflow x 10times

● Construction

28 Layers
Board thickness: 3.8mm



General properties 一般特性

Item		Test method	Condition	Unit	MEGTRON4 R-5725	MEGTRON4S R-5725S	MEGTRONM R-5735
Glass transition temp.(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
Dielectric constant(Dk)	10GHz	IPC-TM-650 2.5.5.5	C-24/23/50	—	3.8	3.8	3.9
Dissipation factor(Df)					0.007	0.007	0.007
Peel strength*	1oz(35μm)	IPC-TM-650 2.4.8	A	kN/m	1.1	1.3	1.2

The sample thickness is 0.8mm.
* RT Copper