



Ultra-low transmission loss Highly heat resistant Multi-layer circuit board materials

超低伝送損失・高耐熱多層基板材料

MEGTRON6

Laminate R-5775(N)* R-5775(K) R-5775(G) R-5775(S)* R-5775(R)
Prepreg R-5670(N)* R-5670(K) R-5670(G)

*Low Dk glass cloth type R-5775(S)/R-5775(R): Buried Resistor Copper Foil

Applications 用途

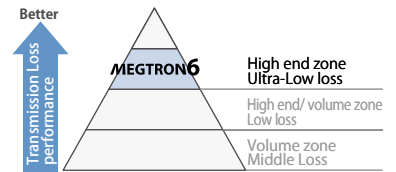
ICT infrastructure equipment, Supercomputer, Measuring instrument, Antenna(Base station, Automotive millimeter-wave radar), Etc.

ICT インフラ機器 (スーパーコンピュータ、計測用機器)、アンテナ (基地局、車載ミリ波レーダ)、高周波用途など



The industry standard for high speed, ultra-low loss PCB material. Excellent HDI and thermal performance.

超高性能サーバルータ向け材料のデファクトスタンダード。低伝送ロスを実現し、超高性能サーバルータの性能向上に貢献

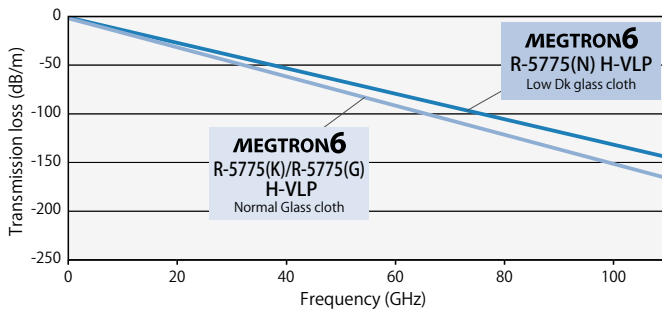


Dk 3.4 Df 0.004 @12GHz

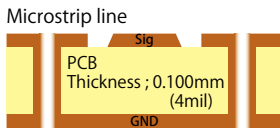
Tg (DSC) 185°C

T288 (with copper) >120min

Frequency dependence by Transmission loss 伝送損失比較



Construction



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

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

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

Result

Drill diameter	φ 0.3mm	
Wall to wall distance	0.5mm	0.6mm
MEGTRON6 (Low Dk glass cloth)	pass	pass

Condition

260°C reflow x 10times

Construction

32 Layers
Board thickness: 4.5mm



General properties 一般特性

Item	Test method	Condition	Unit	MEGTRON6 R-5775(N) Low Dk glass cloth	MEGTRON6 R-5775(K)/R-5775(G) Normal glass cloth	MEGTRON6 R-5775(S) Low Dk glass cloth Buried Resistor Copper Foil	MEGTRON6 R-5775(R) Normal glass cloth Buried Resistor Copper Foil
Tg	DSC	A	°C	185	185	185	185
CTE z-axis	α1	IPC-TM-650 2.4.24	A	ppm/°C	45	45	45
					α2	260	260
T288(with copper)	IPC-TM-650 2.4.24.1	A	min	>120	>120	>120	>120
Dk	12GHz	Balanced-type circular disk resonator	C-24/23/50	-	3.4	3.6	3.4
Df					0.004	0.004	0.004
Peel strength*1	1oz(35 μm)	IPC-TM-650 2.4.8	A	kN/m	0.8	0.8	0.8*2

The sample thickness is 0.75mm.

*1 H-VLP Copper *2 Buried Resistor Copper Foil 1/2oz (18 μm)

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