

DK 3.34 Df 0.0037

@13GHz

Tg (DSC) 185°C

T288 (with copper)

>120min

Applications

Network / Wireless

ICT Infrastructure Equipment, Supercomputer,
Measuring Instrument, Antenna (Base Station,
Automotive Millimeter-Wave Radar)

MEGTRON6

Laminate
R-5775(N)* R-5775(K) R-5775(G)
Prepreg
R-5670(N)* R-5670(K) R-5670(G)
*Low Dk glass cloth type

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

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

Better

Transmission loss
performance

Extreme Low Loss

Ultra Low Loss

MEGTRON6

Very Low Loss

Low Loss

Frequency dependence by transmission loss

Frequency (GHz)	MEGTRON6 R-5775(N) H-VLP Low Dk glass cloth (dB/m)	MEGTRON6 R-5775(K)/R-5775(G) H-VLP Normal glass cloth (dB/m)
0	0	0
20	-25	-30
40	-50	-60
60	-75	-90
80	-100	-120
100	-125	-150

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	0.5mm	0.6mm
MEGTRON6 (Low Dk glass cloth)	pass	pass

Condition

260°C reflow x 10times

Construction

32 Layers
Board thickness: 4.5mm

General properties

Item		Test method	Condition	Unit	MEGTRON6 R-5775(N) Low Dk glass cloth	MEGTRON6 R-5775(K)/R-5775(G) Normal glass cloth
Tg		DSC	A	°C	185	185
CTE z-axis	α 1	IPC-TM-650 2.4.24	A	ppm/°C	45	45
	α 2				260	260
T288(with copper)		IPC-TM-650 2.4.24.1	A	min	>120	>120
Dk	13GHz	Balanced-type circular disk resonator	C-24/23/50	-	3.34	3.62
Df					0.0037	0.0046
Peel strength*	1oz(35μm)	IPC-TM-650 2.4.8	A	kN/m	0.8	0.8

The sample thickness is 0.75mm.

* H-VLP Copper

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 MEGTRON6

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