

Multi-layer circuit board materials for ICT infrastructure equipment

ICTインフラ機器向け多層基板材料

*ICT···Information and Communication Technology

Applications 用途

Server, Router, Switch, Supercomputer, Measuring instrument, Etc. サーバ、ルータ、スイッチ、スーパーコンピュータ、半導体検査装置など

Multi-layer circuit board materials suitable to large capacity and high speed transmission of high frequency signal. 高周波信号などの大容量・高速伝送に対応する多層基板材料

■ Line-up ラインアップ **MEGTRON 7** R-5785(N) [Cu : H-VLP] -20 **MEGTRON6** R-5775(N) [Cu : H-VLP] Transmission loss (dB/m) MEGTRON**6** R-5775 [Cu : H-VLP] Construction MEGTRON4 $35 \mu \text{ m}$ R-5725 [Cu:RT] MEGTRON4S Ţ280 μ m **MEGTRON M** R-5735 [Cu : RT] 100 μ m -60 Core 0.13mm MEGTRON2 R-1577 [Cu:RT] Prepreg 0.06mm x 2ply Line length 1m Cu thickness t=35 μ m **HiPER**R-1755V [Cu: RT] 50Ω Impedance -80 10

■ General properties 一般特性

ltem		Test method	Unit	MEGTRON 7	MEGTRON 6		MEGTRON4	MEGTRON4S	MEGTRON M	MEGTRON 2	HiPERⅥ
				R-5785(N)	R-5775(N)	R-5775	R-5725	R-5725S	R-5735	R-1577	R-1755V
Glass transition temp.(Tg)		DSC	℃	200	185	185	176	200	195	170	173
CTE z-axis	α1	IPC-TM-650 2.4.24	ppm/°C	42	45	45	35	32	31	34	44
	a 2			280	260	260	265	250	240	200	255
T288(with copper)		IPC-TM-650 2.4.24.1	min	>120	>120	>120	30	50	35	25	20
Dielectric constant(Dk)*1	1GHz	IPC-TM-650 2.5.5.9	_	3.4	3.4	3.7	3.8	3.8	3.9	4.1	4.4
Dissipation factor(Df)*1				0.001	0.002	0.002	0.005	0.005	0.005	0.010	0.016
Peel strength*2	1oz(35 μ m)	IPC-TM-650 2.4.8	kN/m	0.8	0.8	0.8	1.1	1.3	1.2	1.3	1.5

The sample thickness of MEGTRON7, MEGTRON6 is 0.75mm. The sample thickness of other part number is 0.8mm.

Frequency (GHz)

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。

^{*}Condition As received.*1 C-24/23/50

*2 MEGTRON7, MEGTRON6 is H-VLP copper. MEGTRON4, MEGTRON4S, MEGTRON M is RT copper. MEGTRON2, HIPER V is ST copper.

Our Halogen-free materials are based on JPCA-ES-01-2003 standard and others. 当社ハロゲンフリー材料は、JPCA-ES-01-2003 などの定義によるものです。