Panasonic INDUSTRY



MEGTRON6

Laminate

R-5775(N)* R-5775(K) R-5775(G)

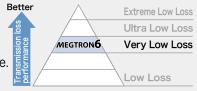
R-5670(N)* R-5670(K) R-5670(G)

*Low Dk glass cloth type

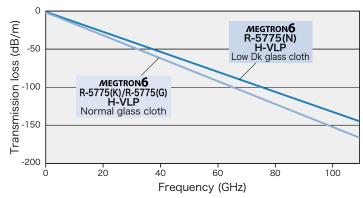
Ultra-low transmission loss, highly heat-resistant multi-layer circuit board materials

The industry standard for high speed, ultra-low loss PCB material.

Excellent HDI and thermal performance.



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: $270\mu m$, Cu thickness: $24\mu m$)

Layer2: GND plane (Cu thickness: 24μ m)

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

| ltem | | Test method | Condition | Unit | MEGTRON6 R-5775(N) Low Dk glass cloth | MEGTRON 6 R-5775(K)/R-5775(G) Normal glass cloth |
|-------------------|-----------|------------------------|------------|----------|--|---|
| Tg | | DSC | А | °C | 185 | 185 |
| CTE z-axis | α1 | IPC-TM-650 2.4.24 | А | ppm/°C - | 45 | 45 |
| | α2 | | | | 260 | 260 |
| T288(with copper) | | IPC-TM-650 2.4.24.1 | А | min | >120 | >120 |
| Dk | - 13GHz | Balanced-type circular | C-24/23/50 | - | 3.34 | 3.62 |
| Df | | disk resonator | | | 0.0037 | 0.0046 |
| Peel strength* | 1oz(35μm) | IPC-TM-650 2.4.8 | А | 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.