



LEXCMGX

Laminate

R-G545L* R-G545E

Prepreg

R-G540L* R-G540E

*Low Dk glass cloth type

Ultra-low transmission loss circuit board materials for IC substrate/Module

Low Dk/Df coupled with low CTE enables devices to evolve and keep pace with changing demands.

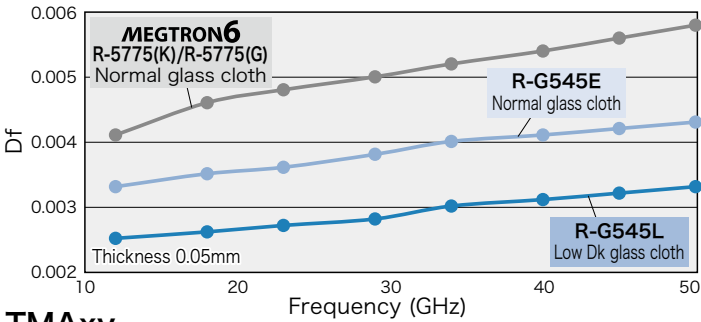
Dk 3.5 Df 0.003 @12GHz

CTE x,y-axis 10ppm/°C
CTE z-axis 22ppm/°C

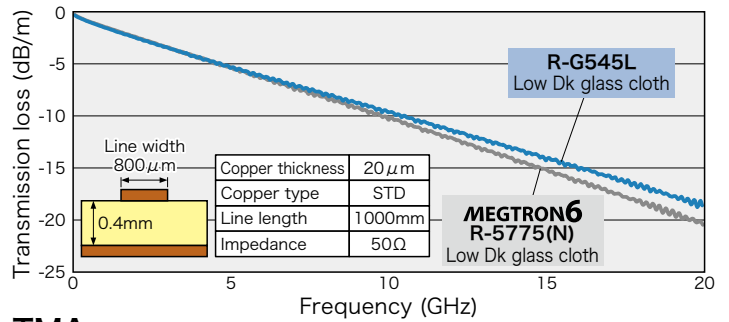
Tg(DMA) 230°C

Applications
IC Package
 IC Package for base station application, Module part

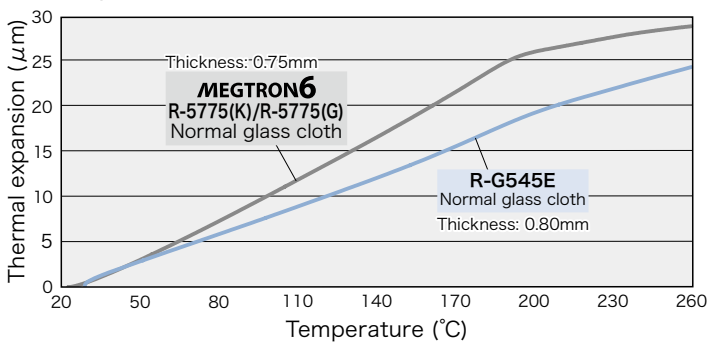
Df at wide-frequency band



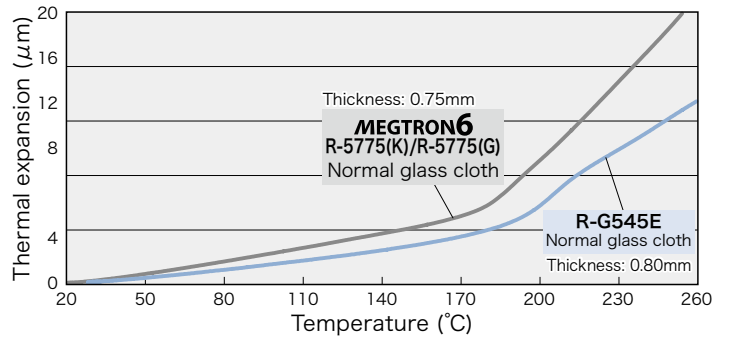
Frequency dependence by transmission loss



TMAxy



TMAz



General properties

| Item | Test method | Condition | Unit | LEXCMGX R-G545L Low Dk glass cloth | LEXCMGX R-G545E Normal glass cloth |
|----------------------------|---------------------------------------|-----------|--------|------------------------------------|------------------------------------|
| Glass transition temp.(Tg) | DMA* | A | °C | 230 | 230 |
| CTE x, y-axis | Internal method | A | ppm/°C | 10 | 10 |
| CTE z-axis | | | | | |
| Dielectric constant(Dk) | Balanced type circular disk resonator | A | - | 3.5 | 4.0 |
| Dissipation factor(Df) | | | | 0.003 | 0.004 |
| Water absorption | IPC-TM-650 2.6.2.1 | D-24/23 | % | 0.06 | 0.06 |

The sample thickness is 0.1mm
 * DMA: Measurement in tensile mode
 Please see our website for Notes before you use.

Our Halogen-free materials are based on JPCA-ES-01-2003 standard and others.
 The above data are typical values and not guaranteed values.