



—Low Dk & Low Df—

Fluorine-film based FCCL “FC series”

Example of use

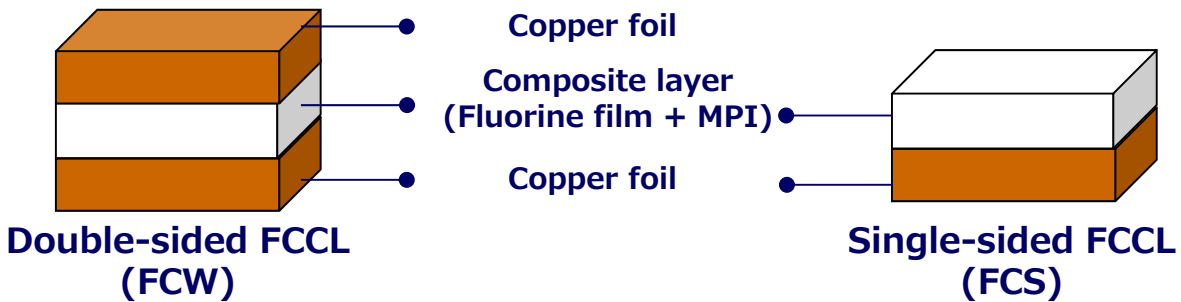
- Substrate for vehicle antenna (LiDAR and others)
- Substrate for base station antenna
- Flexible substrate for high speed data transmission compatible with millimeter-wavelength (for antenna)



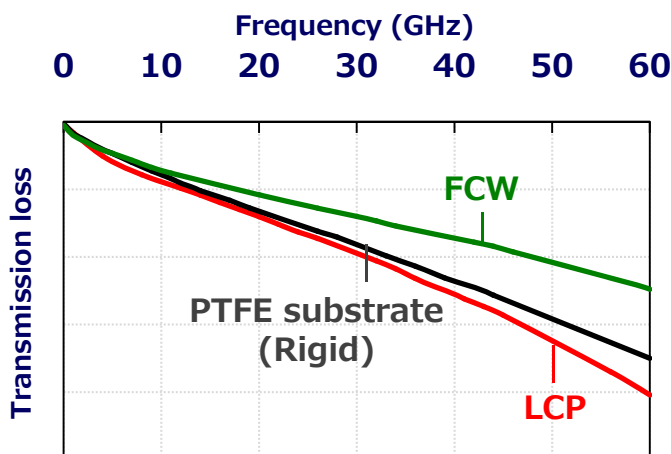
Characteristics

- Low Dk, low Df, and low water absorption.
- Good flexibility. Applicable to flexible printed circuit substrates.
- Thickness lineup for insulation layer are 50, 100, 125, and 200µm. Insulation layer thicknesses other than lineup are available as per customer requests.

Product structure



Product Properties



Circuit : Micro-strip patterning
 Impedance : 50±5Ω (designed)
 Test environment : 23°C, 50%RH
 Insulation layer thickness (FCW) : 100µm (125µm PTFE substrate)
 Cu thickness : 12µm
 Circuit length : 100mm

Item	Unit	FCW	FCS
Dk	-	2.50	2.37
Df	-	0.002	0.003
Water absorption	wt%	0.1	0.1
90° Peel strength	N/cm	10.0	10.0
Solder heat resistance	°C	288°C Pass	288°C Pass



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