

FPC Typical Technical Parameters

Materials		Polyimide	Polyester	Remark
Number of layer		1~4	1~2	
Min.Track Width&Spacing	Single Side	0.05mm(2mils)		
	Double Side	0.075mm(3mils)		
Min.Hole	Drilling P.T.H.	Ø0.30mm		
Diameter	Punching	Ø0.50mm		
Dimension Tolerance	Conductor Width (w)	±0.02mm		≤0.5mm
	Hole Diameter (h)	±0.02mm		≤1.5mm
	Accumulated Pith (p)	±0.05mm		≤25mm
	Outline Dimension (L)	±0.10mm		≤50mm
	Conductors and Outline (c)	±0.075mm		≤5.0mm
	Conductors and Coverlay	±0.05mm		
Surface Treatment on Terminals and land Area		Au: 0.05~1.25µm		Plating/immersion
		Sn/Pb: 2~10µm		
		Spray tin: Above 20µm		
Insulation Resistance		500M Ω		IPC-TM-6502
Dielectric Strength		5KV		IPC-TM-6502
Dissipation Factor(1MHz)		0.042		MIL-P-55617
Peeling Strength(kgf/cm)		1.2	1.0	JIS C6481
Temperature Resistance		-200°C~+300°C		
Flexibility		<500,000 times		
		<10,000 times		R<6 degree
		No break in 7 times		R=0 degree
Surface Resistance		5x10 ¹² Ω		JIS C6481
Volume Resistivity -CM		1x10 ¹⁵ Ω		JIS C6481
Dielectric Constant(1MHz)		4.3	3.1	MIL-P-55617
Flammability(UL 94)		94HB		UL 94
Insulation Strength KV/mm		110	85	ASTM D149
Solder Temperature		280°C/10sec	200°C/10sec	JIS C6481

Material Parameters

Material	PI	PET
Basic material (µm)	12.5、 <u>25</u> 、50、75、125	25、50、 <u>75</u> 、100
Covered membrane (µm)	12.5、 <u>25</u> 、50、75	25、50
Copper thickness (µm)	18、 <u>35</u> 、50、70	
CU material	ED <u>RA</u>	

Note: " _ " in common use