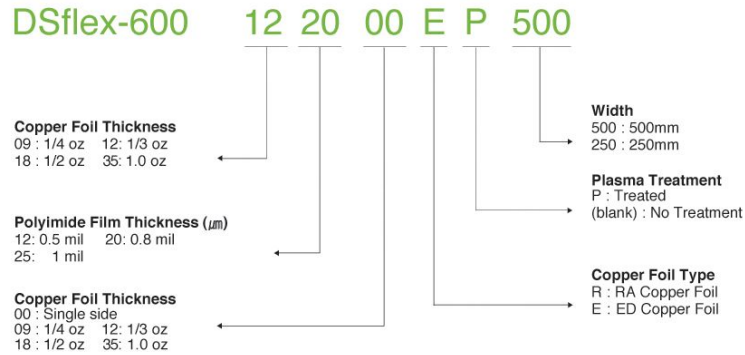


DSflex-600

Material Profile

RULE OF PRODUCT CODE FOR 2-LAYER FCCL:



Definition : Adhesive-less 2 layer flexible copper clad can be used in fabrication of flexible printed circuits, offered in roll form with copper on one or both sides. DSflex-600 is suitable for a wide variety of flexible circuit applications which need high performance, thermal resistance, fine pitch and high reliability.

Single Side

Copper : 12, 18, 35 μm
Polyimide : 12, 20, 25 μm

Double Side

Copper : 9, 12, 18, 35 μm
Polyimide : 14, 20, 25, 50 μm
Copper : 9, 12, 18, 35 μm

DSflex-600

ADHESIVE-LESS FLEXIBLE COPPER CLAD LAMINATE

Features

- Good folding endurance
- Good bond strength to bonding sheet / prepreg
- Excellent dimensional stability
- Excellent thermal resistance
- High tensile strength and elongation
- Plasma treatment
- Low CTE

Applications

- High Flexibility Components like Cellular phone and HDD Pick Up Parts
- Multi layer-FPC
- Rigid Flex
- COF for Display Panel

Mechanical property

Test Item	Unit	Test Method	Properties		
			121200R(HA)	121212E	
Flexural Endurance	MIT (R=0.38) 135°C, 175 rpm	Times	JIS C6471	11,000	3,500
	IPC (R=0.65) Stroke= 25mm, 1500rpm	Cycles	IPC-TM-650 2.4.3	2.7x10 ⁵	5.0x10 ⁴
Peel Strength	Received	kgf/cm	IPC-TM-650 2.4.9	1.2	1.2
	After Solder Float				
Dimensional Stability	After Etching (MD/TD)	%	IPC-TM-650 2.2.4	+0.03 / +0.03	-0.03 / +0.03
	After Thermal (MD/TD)			-0.02 / -0.02	-0.03 / +0.03
Tensile Strength		MPa	IPC-TM-650 2.4.19	255	200
Young's Modulus		GPa		5.0	6.0
Elongation at Break		%		50	50
Moisture Absorption		%		IPC-TM-650 2.6.2	1.1

Electrical & Thermal properties

Dielectric Constant (@1MHz)	-	IPC-TM-650 2.5.5.3	3.3	
Dissipation Factor (@1MHz)	tan δ		0.01	
Insulation Breakdown Voltage	KV/mil	ASTM D149	5	
Solder Float (10sec at 300°C)	-	IPC-TM-650 2.4.13 Method B	pass	
Coefficient of Thermal Expansion (CTE)	ppm/°C	IPC-TM-650 2.4.24	22	22
Flammability	-	UL-94	V-0	