

SH121212EJC Technical Datasheet

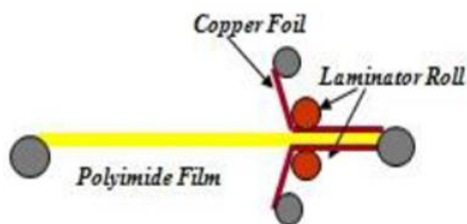
All-Polyimide Flexible Laminate

A family of High-Performance Adhesiveless Laminates for Flexible Printed Circuit Applications

Product Description

SH double-sided, copper-clad laminate is an all-polyimide composite of polyimide film bonded to copper foil. This material system is ideal for low layer count flexible printed circuits which require advanced material performance, temperature resistance, and high reliability. Currently offered in various dielectric thicknesses, SH provides designers, fabricators, and assemblers a versatile option for a wide variety of flexible circuit constructions.

- Excellent thermal resistance due to all-polyimide composition
- High Cu-polyimide adhesion strength
- Good flex & bending performance
- Excellent dimensional stability
- Excellent dielectric thickness tolerance
- Low CTE for rigid flex multilayers
- UL 94 V-0
- Product manufacturing process and Product structure



Cu 12um
PI 12um
Cu 12um

Material Properties

Property	SH121212EJC	Test Method
Adhesion to cu (Peel Strength)		IPC-TM-650,Method 2.4.9
AS Received, kgf/cm	>1.5	Method B
After soldering, kgf/cm	>1.5	Method D
Solder Float		IPC-TM-652,Method 2.4.13
10sec at288℃(550°F)	Pass	with pre-bake at135℃/60nim
Dimensional stability, %		IPC-TM-650,Method 2.2.4
	±0.07	Method B, %
	±0.07	Method C, %
MIT Bending cycles, R=0.38mm	200	JIS C6471

Dielectric Properties

Tensile Strength, Mpa	225	Method 2.4.19
Elongation, %	30	Method 2.4.19
Modulus, Gpa	5.1	Method 2.4.19
Propagation Tear Strength+, g	4.7	Method 2.4.17.1
Dielectric Strength,(Kv/mil)	7-8	ASTMD-149
Dielectric constant (at 10 GHz)	3.2	Gavity Resonator Method
Dissipation Factor (at 10 GHz)	0.007	Gavity Resonator Method
Surface Resistance (Ω-cm)	>10 ¹⁶	Method 2.5.17.1
Volume Resistivity (Ω)	>10 ¹⁴	Method 2.5.17.1
CTE, ppm/°C	17-18	TMA
Moisture Absorption, %	<1.0%	Method 2.6.2 P
Tg, °C	330	DMA

* The value given herein is not specification but typical value based on data believed to be reliable.

* The value in some of the properties may change with different test method and conditions.