

NeXolve TR-Clad™ Flexible Polyimide Laminate

Category : Polymer , Film , Thermoset , Polyimide, TS , Polyimide, Thermoset Film

Material Notes:

The lightest weight copper clad laminates available. TR-Clad™ Flexible Laminates are both the lowest weight and lowest dielectric constant of copper/polyimide laminates available. Additionally, TR-Clad™ are the first flexible laminates manufactured with electrically conductive polyimide. Lightest Weight Copper Clad Polyimide Laminates. TR-Clad™ flexible circuit materials are the lightest weight copper clad laminates available. While several configurations of TR-Clad™ are available, our unique manufacturing processes provide for the fabrication of TR-Clad™ as adhesiveless 2 micron polyimide affixed to 9 micron copper. This is a full 53% lighter than the typical "lightweight" grade of 12.5 micron polyimide affixed to 18 micron copper and even 16% lighter than the lightest grade available on the existing market. Lowest Dielectric Constant. TR-Clad™ exhibits a record-breaking low dielectric constant of 2.5, which is lower than the dielectric constant of 3.7 reported for competitive materials. Such a remarkably low dielectric constant reduces cross-talk between circuit traces and provides for the fabrication of finer feature sizes. This allows for additional miniaturization which provides for even further lowering of final product weight. Electrostatic Dissipative Polyimide. TRClad™ Flexible Laminates are the first copper/polyimide laminates with grades that are made with electrostatically dissipative (ESD) polyimide. A low level of surface electrical conductivity (108-1012 ohm/sq) is required in many applications requiring electrostatic discharge (ESD) functionality to prevent static charge buildup that damages sensitive microchip circuitry affixed to the TR-Clad™ portion of the flexible circuit. There are no other copper/polyimide laminates available with polyimides that are ESD-grade, only non-ESD polyimides. Information Provided by NeXolve Corporation.

Order this product through the following link:

http://www.lookpolymers.com/polymer_NeXolve-TR-Clad-Flexible-Polyimide-Laminate.php

Mechanical Properties	Metric	English	Comments
Tensile Strength	136 MPa	19700 psi	12µm polyimide/9µm copper; ASTM D882-02
Elongation at Break	1.5 %	1.5 %	(12µm polyimide/9µm copper); ASTM D882-02
Tensile Modulus	10.8 GPa	1570 ksi	(12µm polyimide/9µm copper); ASTM D882-02

Thermal Properties	Metric	English	Comments
CTE, linear	20.0 µm/m-°C	11.1 µin/in-°F	(12µm polyimide/9µm copper); ASTM E831-06
	@Temperature -80.0 - 225 °C	@Temperature -112 - 437 °F	
	24.0 µm/m-°C	13.3 µin/in-°F	ESD Grade (12µm polyimide/9µm copper); ASTM E831-06
	@Temperature -80.0 - 225 °C	@Temperature -112 - 437 °F	

Descriptive Properties	Value	Comments
Solar Absorptivity	0.67	(12µm polyimide/9µm copper); ASTM E903-96
	0.95	ESD Grade (12µm polyimide/9µm copper); ASTM E903-96

Descriptive Properties	Value	Comments
------------------------	-------	----------

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China