

material.

Westinghouse Electric Corporation

Insulating Materials Division Bedford, Pa., U.S.A. 15522

64 750 T WE A Technical Data

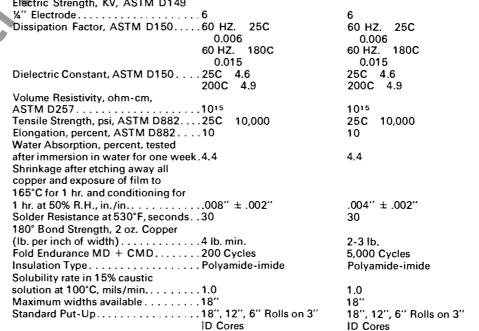
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New Information
Mailed to: E, D, C/2159/PL, DB

Materia

## Flexible Copper-Clad Materials

Copper Clad Kapton® Film	Properties	Typical Values	
Product is available with rolled or electro-	Peel strength (on 0.062" conductors) 90 degree angle at 2"/min., lbs./inch		
deposited copper foil on one or both sides, in a variety of thicknesses of foil and film.	Insulation Resistance, megohms		05, per Western Electric
	Solder Resistance at 500°F (as a circuit)	30 seconds	
Available in rolls in a variety of widths and	Melt Index Fisher Johns, °C	Greater than 270°	
diameters.	Guide to Circuit Lamination in press		
		for 6 min. at 36	
			of 300 psi for 5 min.
① DuPont's Trademark for their Polyimide Film		d. Remove hot.	5. 555 <b>p</b> 5. 757 5
Adhesive Coated Kapton Film	Properties	Typical Values	
Aunesive Coated Rapton Fifth	Thickness of adhesive		0.002"
This product is coated on one side to a variety	Type of adhesive		
of thicknesses. It has excellent electrical prop-	Melt Index of adhesive, Fisher Johns, °C		
erties and shelf life.	Insulation Resistance		
Available in rolls in a variety of widths and	Guide to Circuit Lamination in press	Electric Spec. MS	
diameters.	Guide to Gircuit Lamination in press		press contact pressure
diamotors.	for 6 min. at 360°F.		
			of 300 psi for 5 min.
		d. Remove hot.	
	Solder resistance of laminated Circuit	Greater than 30 se	ec. at 500°F
SOLDER FLEXTM	Properties of .002 SOLDER FLEX Typic	cal Values on	Typical Values on
(Polyamide-imide Insulated Copper Foil)		rodeposited Copper	Rolled Annealed Copper
This adhesiveless system is available on rolled	Electric Strength, KV, ASTM D149		
and electrodeposited copper foil from 1 to 4 oz./sq. ft. Maximum coating thickness	"X" Electrode	7 25C	6 60 HZ. 25C
4 oz./sq. π. Maximum coating thickness 0.001" ± 10%/oz. Double clad available with	0.0		0.006
epoxy adhesive system.		. 180C	60 HZ. 180C
	0.0		0.015
This is typical test data taken from production	Dielectric Constant, ASTM D15025C	4.6	25C 4.6



Copper Clad Polyester Film

Product is available with rolled or electrodeposited copper foil on one or both sides, in a variety of thicknesses of copper foil and film. It can be obtained as a fire retardant grade.

The material as listed meets or exceeds requirements specified in 1PC-FC-220, IPC-FC-231, IPC-CF-150, IPC-FC-241.

Available in rolls in a variety of widths and diameters.

Properties	Typical Values	
Peel Strength, lbs./inch	.8	•
Conductor Bend Resistance, cycles		*
ED Copper (2 oz.)	. Approx. 100	
Rolled Copper (2 oz.)	. Approx. 250	
Dimensional Change, Mils/in	. Etch Therma	ıl
	40°C bath 48 hrs.,	/125°C
	MD CMD MD	CMD
	1.0 Less th	an 10.0 1.0
Melt Index of adhesive, Fisher Johns, °C	. Greater than 210°C	

Adhesive Coated Polyester Film

This product is coated on one or both sides to a variety of thicknesses with controlled shrinkage. It has excellent electrical properties and shelf life. Available in regular and fire retardant grades.

The material as listed meets or exceeds requirements specified in 1 PC-FC-231.

Available in rolls in a variety of widths and diameters.

Properties	Typical Values
Thickness of adhesive, inches	From 0.001" to 0.006" $\pm$ 10%
Type of adhesive	Polyester
Flammability requirements	Tailored to fit any or all of the following
	requirements:
	a III

b. LOI c. ASTM 568

Spec. MS58538

. Tailored to fit (L01, UL, ASTM 568)

**Basic Materials** 

Flammability Requirements.....

Copper Foil..... Meets IPC-CF-150 1 oz./sq. ft. and heavier gauges; rolled, hard or annealed; electrodeposited, high ductility; treated to withstand etching, plating and cleaning.

Polyester Film

Meets IPC-FC, 231, 1, 2, 3, and 5, mil gauges.

chart