

UV-blocking Epoxy Laminate

Isola offers the ED130UV epoxy laminate to meet the requirements of developing printed circuit boards using UV blocking materials.

These grades utilize a difunctional epoxy resin core with modified tetrafunctional epoxy face plies to provide for Ultraviolet (UV) blocking, and also fluorescence when using Automated Optical Inspection (AOI).

Product Attributes

Legacy Materials

Typical Market Applications

Consumer Electronics , Automotive & Transportation , Medical, Industrial & Instrumentation

ORDERING INFORMATION:

Contact your local sales representative or visit www.isola-group.com for further information.

Isola GmbH

Germany

Isola Strasse 2 D-52348 Düren,

info-dur@isola-

group.com

Phone: 49-2421-8080

Fax: 49-2421-808164

Isola Group 3100 West Ray Road

Suite 301 Chandler, AZ 85226

Phone: 480-893-6527

Fax: 480-893-1409 info@isola-group.com

Isola Asia Pacific (Hong Kong)

Unit 3512 - 3522, 35/F No. 1 Hung To Road, Kwun

Kowloon, Hong Kong Phone: 852-2418-1318

Fax: 852-2418-1533 info.hkg@isola-group.com

Data Sheet

Legacy Materials

Tg 135°C Td °C Dk 4.35 Df 0.017

IPC-4101 - / 21

UL - File Number E41625

Last Updated May 7, 2019 Revision No: C

Product Features

- · Industry Recognition
- UL File Number: E41625

Product Availability

- · Standard Material Offering: Laminate
 - Available in full size sheet or panel form
- · Copper Foil Type
 - HTE Grade 3
 - RTF (Reverse Treat Foil)
- · Copper Weight
 - $\frac{1}{2}$ to 2 oz (18 to 70 µm) available

	<u></u>		Units	Test Method
Property		Typical Value	Metric (English)	IPC-TM-650 (or as noted)
Glass Transition Temperature (Tg) by DSC		135	°C	2.4.25C
Time to Delaminate by TMA (Copper removed)	T260	10	Minutes	2.4.24.1
Z-Axis CTE	50 to 260°C, (Total Expansion)	0.017	%	2.4.24C
X/Y-Axis CTE	Pre-Tg	13	ppm/°C	2.4.24C
Thermal Stress 10 sec @ 288ºC (550.4ºF)	A. Unetched B. Etched	Pass	Pass Visual	2.4.13.1
Dk, Permittivity	A. @ 100 MHz B. @ 500 MHz C. @ 1 GHz	4.7 4.35 4.34	_	2.5.5.3 2.5.5.3 2.5.5.9
Df, Loss Tangent	A. @ 100 MHz B. @ 500 MHz C. @ 1 GHz	0.020 0.015 0.016	_	2.5.5.3 2.5.5.3 2.5.5.9
Volume Resistivity	A. C-96/35/90 B. After moisture resistance C. At elevated temperature	-	MΩ-cm	2.5.17.1
Surface Resistivity	A. C-96/35/90 B. After moisture resistance C. At elevated temperature	_	МΩ	2.5.17.1
Dielectric Breakdown		55	kV	2.5.6B
Arc Resistance		100	Seconds	2.5.1B
Comparative Tracking Index (CTI)		3 (175-250)	Class (Volts)	UL 746A ASTM D3638
Peel Strength	1 oz. EDC foil	9.0 (161)	N/mm (lb/inch)	2.4.8C
Flexural Strength	A. Length direction B. Cross direction	80.0 60.0	ksi	2.4.4B
Tensile Strength	A. Length direction B. Cross direction	50.0 40.0	ksi	ASTM D3039
Young's Modulus	A. Length direction B. Cross direction	3500 3010	ksi	ASTM D790-15e2
Poisson's Ratio	Length direction	0.136	_	ASTM D3039
Flammability (Laminate & laminated prepreg)		V-0	Rating	UL 94
Relative Thermal Index (RTI)		130	°C	UL 796

The data, while believed to be accurate and based on analytical methods considered to be reliable, is for information purposes only. Any sales of these products will be governed by the terms and conditions of the agreement under which they are sold.



NOTE

Visit our site http://www.isola-group.com for more details. Revisions:

A: Initial release - 4/17

B: Corrected units for Flexural and Tensile Strength - 8/18

C: Change MOT to RTI 5/19