

isola

ED130UV

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

Legacy Materials

Data Sheet

Tg 135°C

Td °C

Dk 4.35

Df 0.017

IPC-4101/21

UL - File Number E41625

Last Updated December 7, 2017
Revision No: 6

Product Features

Product Availability

ED130UV Typical Values

Last Updated Dec 7, 2017

Property		Typical Value	Units	Test Method
			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 @ 288°C (550.4°F)	A. Unetched B. Etched	Pass	Pass Visual	2.4.13.1
Dk, Permittivity	A. @ 100 MHz	4.7	—	2.5.5.3
	B. @ 500 MHz	4.35		2.5.5.3
	C. @ 1 GHz	4.34		2.5.5.9
Df, Loss Tangent	A. @ 100 MHz	0.020	—	2.5.5.3
	B. @ 500 MHz	0.015		2.5.5.3
	C. @ 1 GHz	0.016		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	—	MΩ	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	80,000 (552)	ksi	2.4.4B
	B. Cross direction	60,000 (414)		
Tensile Strength	A. Length direction	50,000	ksi	ASTM D3039
	B. Cross direction	40,000		
Young's Modulus	A. Length direction	3500	ksi	ASTM D790-15e2
	B. Cross direction	3010		
Poisson's Ratio	Length direction	0.136	—	ASTM D3039
Flammability (Laminate & laminated prepreg)		V-0	Rating	UL 94
Max Operating Temperature		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.

