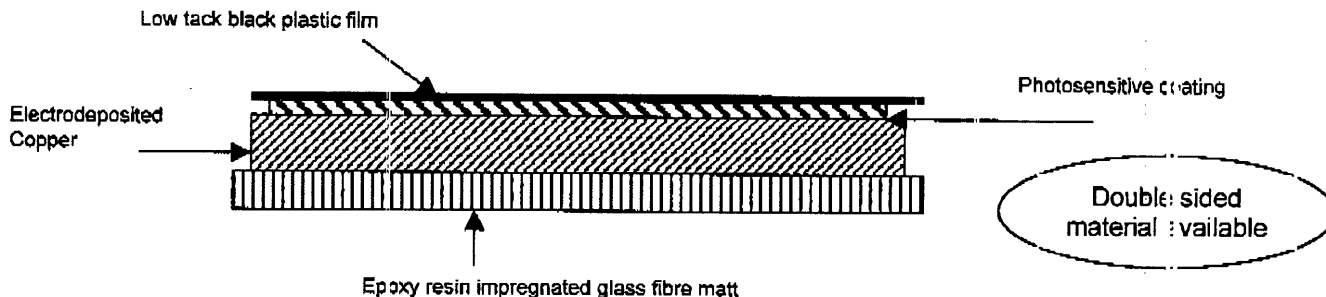


FOTOBOARD - PRE-SENSITISED COPPER BOARD

The first choice for the production of quality printed circuit board

Fotoboard is a positive working, Photoresist coated, glass fibre printed circuit laminate to BS4584 and MILSPEC MIL-P-1394GE GRN. The resist is applied 5 microns thick using a specially developed roller coating process which ensures a particularly even layer. The resist is high temperature cured which, combined with its tough plastic film laminate covering, results in a durable board which can be handled, guillotined and processed with a high degree of safety. Inspection at the development stage is simplified by use of a green dye in the Photoresist. Fotoboard is 1/16" thick, 1oz copper. It has a minimum shelf life of one year and is available as both single and double sided. 2oz and other thickness' are available on request.



Thickness	1/16" (1.6mm)
Copper per square foot	1 oz (35 microns)
Water Absorption	0.12%
Dielectric Constant (1 MHz)	4.55
Dissipation Factor	0.0175
Flexural strength, Lengthways (N/mm ²)	530.00
Flexural strength Crosswise (N/mm ²)	425.00
Peel Strength (N/mm ²)	1.95

GENERAL TECHNICAL CHARACTERISTICS

	CHARACTERISTICS	CONDITIONING	UNIT	FOTOBOARD (FR4)	METHODOLOGY	FPC-16	METHODOLOGY
Non Electrical Tests on Base Material	Flexural Strength	Lengthwise / Crosswise A	N/mm ²	570/460	MILP.13949	370/250	NEIA L1-1
	Punchability	A		1	DIN 53488	1	DI 53488
	Hardness	A	M Scale	112		105	
	Shear Strength	A	N / mm ²	138.5		105	
	Flammability	A: E-169 / 170	S	20(V-0)	UL94	10(V-0)	UL 94
	Temperature Index	A	°C	130	UL746	130	UL 746
	Water Absorption	E-1 / 105 + D- 24 / 23	%	0.1	MILP.13949	0.25	NEIA L1-1
	Pressure Vessel Thermal Stress	C-1/2 / 15 psi +E-20s / 280		5	MILP.13949		
	Thermal Stress	E-6/150+E10s / 288	S	>40	MILP.13949	>40	MIL P.13949
	Peel Strength	As received	N/mm	2.2	MILP.13949	2.10	MIL P.13949
Non Electrical Tests on Metal Clad Material	Peel Strength	After thermal stress	N/mm	1.9	MILP.13949	1.8	NEIA L1-1
	Peel Strength	E-1/125(FR3:E-1/105)	N/mm	1.7	MILP.13949	1.6	NEIA L1-1
	Peel Strength	After exposure to processing Sol	N/mm	1.85	MILP.13949	1.7	MIL P.13949
	Warp on Panels 304x304mm	A	%	0.5	MILP.13949	1.0	MIL P.13949
Electrical Tests	Electrolytic Corrosion	C-96/40/82		A/1.4	1EC.249	A/1.0	1E .249
	Dielectric Breakdown	To lamination D48/50+D-1/2/ 23	KV	70	MIL P 13949	65	NEIA L1-1
	Electric Strength	D-48 / 50+D -1/2/23	V/mil		MILP 13949		
	Permittivity	1 MHZ C-40 / 23/50		4.5	MILP 13949		
	Permittivity	1 MHZ D-24 / 23			1EC.249	4.2	NEIA L1-1
	Dissipation Factor	1 MHZ C-40 / 23/50		0.017	MILP 13949		
	Dissipation Factor	1 MHZ D-24 / 23					
	Surface Resistance	Moisture resistance		22 x 10 ¹²	MIL P 13949	0.03	NEIA L1-1
	Surface Resistance	E24/125 (FR3:E-4/105)		5 x 10 ¹¹	MIL P 13949	7 x 10 ¹⁰	MIL P.13949
	Volume Resistivity	Moisture resistance	cm	27 x 10 ¹²	MIL P 13949		
	Volume Resistivity	E24/125 (FR3:E-4/105)	cm	3 x 10 ¹²	MIL P 13949	8 x 10 ¹¹	MIL P.13949
	Volume Resistivity	C96-35-90	cm	3 x 10 ¹²	MIL P 13949	40 x 10 ¹²	NEIA L1-1



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