

Product Data Sheet

Fabric/F2 - This is a Synthetic Phenolic Resin Bonded Plastic with a medium weave fabric reinforcement.

This material is normally considered as a general purpose plastic / laminate; with a combination of good electrical and mechanical strengths this is the most commonly used of all the industrial laminated plastics.

Physical Properties

Properties		Units	Values
Colour - Tan / Brown		-	-
Density		g/cm ³	1.3 - 1.4
Water absorption	1.6mm	mg	90
	3mm	mg	105
	6mm	mg	122
	12mm	mg	160
Thermal Properties			
Maximum working temperature	continuous	°C	120
	intermittent	°C	130
Thermal classification			E
Flammability category			-
Thermal conductivity through laminae		W/(mK)	0.32
Thermal expansion in plane of laminae		X10 ⁻⁵ /K	2.2
Specific heat		KJ/(kgK)	1.5
Mechanical Properties			
Cross breaking strength		MPa	130
	-at 150°C (after 1 hour at 150°C)	MPa	-
	-at 150°C (after 100 hours at 200°C)	MPa	-
Charpy impact strength	un-notched	kJ/m ²	30
	notched	kJ/m ²	11.5
Compressive strength	flatwise	MPa	310
	edgewise	MPa	200
Resistance to flatwise compression		%	1.5
Flexural strength		MPa	115
Shear strength (flatwise)		MPa	
Electrical Properties			
Insulation resistance		Ω (ohms)	
	-after immersion in water	Ω (ohms)	1 x 10 ⁸
Loss tangent a 1MHz		-	-
Permittivity at 1MHz		-	-
Dielectric Constant Er		Er	5
Comparative tracking index (CTI)		CTI	100
Specifications			
BS2572 Type F2, BSEN60893 Type 3-4-PFCC203, NEMA CE, DIN7735 HGW2082.5			

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