

### DATA SHEET

Laminate: **LBNN**

**Description:** Paper base laminate with phenolic resin binder suitable for hot punching up to and including 3 mm

According to specifications	CEI 15/10	TR	Unit	Average values	Test method	Test conditions
	CEI EN 60893	PF CP 207				
	DIN 7735	Hp 2061				
	NEMA LI - 1	XP				

Physical properties	Colour		black		
	Specific gravity	g/cm <sup>3</sup>	1,4	ISO 1183	a
	Water absorption mm 1	mg	450	IEC 60893-2	b + d
	Thermal classification	°C	E (120°C)	IEC 60216	-
	Self extinguishing		HB	UL 94	-
	Thermal conductivity	W/mK	0,25	ISO 8302	-
	Expansion coefficient	10 <sup>-6</sup> /K	-	VDE 0304/VSM	-
	Silicone resin content	%	-	IEC 371-2	-
	Mica content	%	-	IEC 371-2	-
Mechanical properties	Flexural strength ⊥	MPa	80	ISO 178	a
	Charpy impact strength	KJ/m <sup>2</sup>	-	ISO 179	-
	Tensile strength	MPa	-	ISO 527	-
	Compressive strength ⊥	MPa	-	ISO 604	-
	Bonding strength //	N	-	CEI	-
	Modulus of elasticity	MPa	-	ISO 178	-
Dielectrical properties	Insulation resistance	MΩ	-	ISO 60167	-
	Dielectric strength // to lamination	KV	30	ISO 60243-1	a
	Dielectric strength ⊥ to lamination	KV/mm	1	ISO 60243-1	-
	Tracking resi stance	V	-	IEC 60112	-
	Arc resistance	S	-	ASTM D495	-
	Dissipation factor at 1 MHz		-	IEC 60250	-
	Dielectric constant (permittivity) at 1 MHz		-	IEC 60250	-

The values shown above are indicative as they represent the average values observed during our routine control tests.

The user must make sure that the product he requests is compatible with the use to which it is destined.

#### Test condition:

- a) 48h 15-35°C 45/75 % relative humidity b) 1h 105°C c) 24h 105°C d) 24h 23°C in water  
 e) 48h 50°C in water f) 24h 120°C in oil g) 96h 45°C 95% relative humidity

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La MISOLET



THICKNESS mm	TOLERANCE	Particular properties: - Good dielectric characteristics - Fair mechanical properties - Suitable for punching
0,5	± 0,07	
0,6	± 0,08	
0,8	± 0,10	
1,0	± 0,11	
1,2	± 0,13	
1,5	± 0,14	
2,0	± 0,17	
2,5	± 0,20	
3,0	± 0,20	
-	-	
-	-	
-	-	
-	-	
-	-	
-	-	

TO BE KEPT in dry stores, in a horizontal position

We are available to effect cutting to measurement as well as machining to drawing of parts by CNC

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