

MC320LE TECHNICAL DATA BULLETIN

GRADE: MC320LE NEMA: LE U.L. LISTED: N

DESCRIPTION: Grade MC320LE is a fine weave bleached cotton phenolic composite that has excellent machining characteristics and low moisture absorption. Applications include marine applications, terminal boards and parts requiring medium strength and excellent electrical characteristics.

TYPICAL PROPERTIES

			VALUE			
		UNITS	Thickness Tested			
			0.0625"	0.125"	0.500"	
PHYSICAL PROPERTIES						
Specific Gravity						
(ASTM D792)		-			1.38	
Rockwell Hardness						
(ASTM D785)	0.250" Build-up	M Scale	102			
Moisture Absorption	Condition A					
(ASTM D570)		%		0.87		
Flexural Strength	Condition A	psi		24,000 /		
(ASTM D790)	LW / CW	(Mpa)		(165.5) /		
Tensile Strength	Condition A	psi		18,800 /		
(ASTM D638)	LW / CW	(Mpa)		(129.6) /		
Izod Impact Strength	Condition A	ft-lb/in				
(ASTM D256)	LW / CW	(J/cm)				
	Condition E-48/50	ft-lb/in		1.50 /		
	LW / CW	(J/cm)		(0.80) /		
Compressive Strength	Condition A	psi		38,000		
(ASTM D695)	Flatwise	(Mpa)		(262.0)		
Bonding Strength	Condition A	lb			1,700	
(ASTM D229)		(kg)			(771.1)	
Shear Strength	Condition A	psi		14,000		
(ASTM D732)	Perpendicular	(Mpa)		(96.5)		



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TYPICAL PROPERTIES (continued)

		LIMITO	VALUE			
		UNITS	Thickness Tested			
			0.0625"	0.125"	0.500"	
THERMAL PROPERTIES						
Temperature Index ¹ (UL Bulletin 746b)	Electrical / Mechanical	°C		115 / 125		
Tg by DSC Scan (DELT/	A)	°C				
Flammability Rating (UL Bulletin 94)	Condition A	Class	НВ			
ELECTRICAL PROPERTIES						
Dissipation Factor @ 1 MHz	Condition A	-	0.044			
Relative Permittivity @ 1 MHz	Condition A	-	5.30			
Breakdown Voltage (ASTM D149)	Condition A	kVolts	70			
Arc Resistance (ASTM D495)	Condition A	sec		130		

¹ This temperature is a recommendation only, and based upon experience in various applications. The maximum operating temperature is dependent upon the application and should be investigated prior to use.

This data, while believed to be accurate and based on reliable analytical methods, is for informational purposes only. The terms and conditions of the agreement under which it is sold will govern any sales of this product. Data supplied above are "typical values"; not to be considered "specification values".

It is the responsibility of the users of this information to make sure that they have the latest version of this TDB, and are urged to check with Customer Service or, preferably our web site, www.norplex-micarta.com, to determine if the information is the most current available.

Specification writers: Contact Norplex-Micarta for specification values before submission.