

NP506A

TECHNICAL DATA BULLETIN

GRADE: NP506A

NEMA LI 1-1998 Grade: FR-4

U.L. LISTED: N

DESCRIPTION: NP506A is a woven glass fabric composite combined with epoxy resin system. It is engineered to provide NEMA grade FR-4 properties. NP506A is certifiable to MIL-I-24768/27, Type GEE-F, ANSI/NEMA IM 60000-2021 Grade FR-4, IEC 60893-3-2 PE GC 202, ASTM D709 Type FR-4 and IPC 4101/21. NP506A is a material that is imported into the United States from Norplex-Micarta's China facility.

TYPICAL PROPERTIES

		UNITS	VALUE		
			Thickness Tested		
			0.0625"	0.125"	0.500"
PHYSICAL PROPERTIES					
Moisture Absorption (ASTM D570)	Condition D ₁ -24/23	%	0.10		
Flexural Strength (ASTM D790)	Condition A LW / CW	psi (MPa)	65,000 / 52,000 (448.2) / (358.5)		
Izod Impact Strength (ASTM D256)	Condition A LW / CW	ft-lb/in (J/cm)			
	Condition E-48/50 LW / CW	ft-lb/in (J/cm)			7.90 / 7.30 (4.22) / (3.90)
Bonding Strength (ASTM D229)	Condition A	lb (kg)			2,000 (907.2)

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TYPICAL PROPERTIES (continued)

	UNITS	VALUE		
		Thickness Tested		
		0.0625"	0.125"	0.500"
THERMAL PROPERTIES				
Flammability Vertical <i>(UL Bulletin 94)</i>	Condition A Class	V-0		
ELECTRICAL PROPERTIES				
Dissipation Factor @ 1 MHz	Condition A -	0.032		
Relative Permittivity @ 1 MHz <i>(ASTM D150)</i>	Condition A	-		
	Condition D-24/23	-	4.98	
Breakdown Voltage <i>(ASTM D149)</i>	Condition A	kVolts	66	
	Condition D-48/50	kVolts	65	

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".

To assure the material's performance is adequate for a specific application; customers should verify, independent of Norplex-Micarta, performance characteristics of interest.

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.