

RT500F

TECHNICAL DATA BULLETIN

GRADE: RT500F

NEMA LI 1-1998 GRADE: G-10

U.L. LISTED: N

DESCRIPTION: The RT500F has good electrical properties under humid conditions, excellent heat resistance and mechanical properties. RT500F is made with a fine weave woven glass fabric, for better machining and a smoother surface finish. It also complies with ANSI/NEMA IM 60000-2021 Grade G-10, MIL-I-24768/2, Type GEE and ASTM D709 Type IV Grade G-10.

TYPICAL PROPERTIES

	UNITS	VALUE		
		Specimen Tested (ID x OD)		
			0.75" x 1.00"	
PHYSICAL PROPERTIES				
Specific Gravity <i>(ASTM D792)</i>	-		1.90	
Rockwell Hardness <i>(ASTM D785)</i>	M Scale		110	
Moisture Absorption Condition D ₁ -24/23 <i>(ASTM D570)</i>	%		0.07	
Tensile Strength Condition A <i>(ASTM D638)</i>	psi		50,000	
Compressive Strength Condition A <i>(ASTM D695)</i>	psi		44,000	
Compressive Modulus Condition A <i>(ASTM D695)</i>	kpsi		1,065	

RT500F - TYPICAL PROPERTIES (continued)

	UNITS	VALUE		
		Specimen Tested (ID x OD)		
			0.75" x 1.00"	
THERMAL PROPERTIES				
Temperature Index ¹	Electrical / Mechanical	°C	200 / 200	
Tg by DMA	Condition A	°C	≥ 170	
Flammability Rating (UL Bulletin 94)	Condition A	Class	HB	
ELECTRICAL PROPERTIES				
Dissipation Factor @ 1 MHz (ASTM D150)	Condition A	-	0.024	
	Condition D-24/23	-	0.034	
Relative Permittivity @ 1 MHz (ASTM D150)	Condition A	-	4.39	
	Condition D-24/23	-	4.46	
Breakdown Voltage (ASTM D149)	Condition A	kVolts	65	
	Condition D-48/50	kVolts	75	
Electric Strength (ASTM D149)	Condition A	Volts/mil	475	
	Condition D-48/50	Volts/mil	500	

¹ NEMA LI-6: 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".

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 contact Customer Service, or preferably our web site, www.norplex-micarta.com, to determine if information is the most current.

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