



Global Thermoset Composite Solutions

# RT500F

## TECHNICAL DATA BULLETIN

GRADE: RT500F

NEMA 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 MIL-I-24768/2, Type GEE and ASTM D709 Type IV Grade G-10.

### TYPICAL PROPERTIES

	UNITS	VALUE <sup>1</sup>		
		Specimen Tested (ID x OD)		
			0.75" x 1.00"	
<b>PHYSICAL PROPERTIES</b>				
<b>Specific Gravity</b>	-		1.85	
<b>Rockwell Hardness</b>	M Scale		115	
<b>Moisture Absorption</b> Condition D <sub>1</sub> -24/23	%		0.14	
<b>Tensile Strength</b> Condition A	psi		38,900	
<b>Compressive Strength</b> Condition A	psi		30,600	

## TYPICAL PROPERTIES (continued)

	UNITS	VALUE <sup>1</sup>		
		Specimen Tested (ID x OD)		
			0.75" x 1.00"	
<b>THERMAL PROPERTIES</b>				
<b>Temperature Index</b> <sup>2</sup>				
Electrical / Mechanical	°C		200 / 200	
<b>Flammability Rtg. (UL 94)</b> Condition A	Class		HB	
<b>ELECTRICAL PROPERTIES</b>				
<b>Dissipation Factor</b> Condition A	-		0.030	
	Condition D-24/23	-	0.040	
<b>Permittivity</b> Condition A	-		4.41	
	Condition D-24/23	-	4.48	
<b>Breakdown Voltage</b> Condition A	kVolts		60	
<b>Electric Strength</b> Condition A	Volts/mil		435	
	Condition D-48/50	Volts/mil	430	

<sup>1</sup> All testing performed to ASTM D-348 unless otherwise indicated.

<sup>2</sup> 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".

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](http://www.norplex-micarta.com), to determine if information is the most current.

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