



Ryertex Grade G5/G9

TECHNICAL DATA BULLETIN

NEMA GRADE: G5/G9

U. L. LISTED: Yes

DESCRIPTION: Ryertex G5 & G9 have a woven glass fabric substrate impregnated with a melamine resin. G5 & G9 are very hard, flame resistant, machining grades with excellent electrical properties in humid conditions. The grades have high physical strengths and excellent arc resistance.

TYPICAL PROPERTIES

GENERAL PHYSICAL PROPERTIES	UNITS	VALUE
Specific Gravity (ASTM D792)	-	1.85
Moisture Absorption (ASTM D570) Condition A	%	.60
Rockwell Hardness (ASTM D785)	M Scale	115
Tensile Strength (ASTM D638) Condition A	psi	LW – 44,000 CW -- 34,000
Flexural Strength (ASTM D790) Condition A	psi	LW -- 61,600 CW -- 51,100
Flexural Modulus (ASTM D790) Condition A	Kpsi	LW -- 2,000 CW -- 1,700
Bond Strength (ASTM D229) Condition A	Lb	1,900
Izod Impact Strength (ASTM D256) Condition E	Ft-lb/in	LW -- 12.50 CW -- 8.50
Shear Strength (ASTM D732) Condition A	psi	18,000
Compressive Strength (ASTM D695) Condition A	psi	70,000
THERMAL PROPERTIES	UNITS	VALUE
Temperature Rating (Bulletin 746b)		140C / 284F
Coefficient of Thermal Expansion (IPM-TM, 650-2.4.24)	$"/^{\circ}\text{C} \times 10^{-6}$	y-axis 15.0 x-axis 18.0
Flammability Rating (UL 94) Condition A		V-0

ELECTRICAL PROPERTIES			
Breakdown Voltage (ASTM D149)	Condition A	KV	55
	Condition D-48/50	KV	40
Electric Strength (ASTM D149)	Condition A	Volts/mil	375
	Condition D-48/50	Volts/mil	200
Arc Resistance (ASTM D495)	Condition A	Sec	100
Comparative Tracking Index (ASTM D3638)		Volts	600

This data, while believed to be accurate and based on reliable analytical methods, is for informational purposes only. 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 to determine if information is most current.

The temperature is a recommendation only. The maximum operating temperature is dependent upon the application and should be tested accordingly.