



ISO 9001: 2008 - QUALITY ASSURANCE

Distributor & Fabricator of Engineered Plastic & Electrical Parts

NEMA G-3 GLASS PHENOLIC

Barriers, Supports, Guides

Terminal Blocks, Switch Plates, Coil Boards

Covers, Barrier Plates + Shims

Collars, Wedges, Rollers, Sleeves

Mechanical Properties

Specific Gravity	gm / cc			1.80
Tensile Strength	PSI	lengthwise		42,000
Tensile Strength	PSI	crosswise		34,000
Compressive Strength	PSI	flatwise		70,000
Flexural Strength	PSI	lengthwise		55,000
Flexural Strength	PSI	crosswise		50,000
Hardness	Rockwell (M)			120
Water Absorption	%	24 hrs	0.125 th	0.60
Coefficient of Thermal Expansion	in/in/C degree			0.000015
Heat Resistance / Maximum Constant Operating Temp		mechanical		180C
		electrical		140C

Electrical Properties

Dielectric Strength	VPM	perpendicular	0.062 th	650
			0.125 th	575
Dielectric Constant	1 Mhz	Condition A		6.50

Grade G-3 is a high-performance Glass reinforced Phenolic Thermoset with especially high mechanical values and offering high Thermal endurance properties with very low Dissipation Factor and Creep Resistance. UL Flammability self-extinguishing UL94V-0

Values are based on typical Test Methods and Conditions and published for Reference purposes only