

DATA SHEET

GLASS SILICON NEMA GRADE G-7

<b>BASE MATERIAL</b>	Glass Fibric
<b>RESIN</b>	Silicone
<b>MILITARY SPECIFICATION</b>	MIL-P-997
<b>MIL-SPEC TYPE</b>	GSG
<b>TENSIL STRENGTH</b>	
Lengthwise	23,000
Crosswise	18,500
<b>COMPREHENSIVE STRENGTH (psi)</b>	
Flatwise	45,000
Edgewise	14,000
<b>FLEXURAL STRENGTH, MIN FOR 1/8 -ILN SPECIMEN (psi)</b>	
Lengthwise	20,000
Crosswise	18,000
<b>MODULUS OF ELASTICITY, FLEXURAL</b>	
Lengthwise	1,400 m
Crosswise	1,200 m
<b>SHEAR STRENGTH (psi)</b>	17,000
<b>IZOD IMPACT, MIN (ft-lb per in.of notch)</b>	
Flatwise	6.5
Edgewise	5.5
<b>HARDNESS, ROCKWELL (M - scale)</b>	100
<b>SPECIFIC GRAVITY</b>	1.68
<b>COEFFICIENT OF THERMAL EXPANSION (per deg C)</b>	
<b>WATER ABSORPTION, MAX IN 25HR (%)</b>	
1/16 in.	.55
1/2 in.	.2
<b>DIELECTRIC STRENGTH, PERPENDICULAR TO lamination, shor-time test (v-mil)</b>	
1/16 in.	400
1/8 in.	350
<b>DISSIPATION FACTOR, MAX 1 MC, ASTM D-150, Condition A</b>	.003
<b>DIELECTRIC CONSTANT, MAX 1 MC, ASTM D-150, Condition A</b>	4.2
<b>INSULATION RESISTANCE, 96 HR, 90 PERCENT RH, 95 (megohms)</b>	2500
<b>BONDING STRENGTH, MIN (lb)</b>	650
<b>THERMAL CONDUCTIVITY (cal-cm/sec-sq cm-deg C)</b>	7 X 10 <sup>-4</sup>
<b>MAX. OPERATING TEMP. °F.</b>	465
Machine Design, June 16, 1966	



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