

G10/FR4 Data Sheet			
Mechanical	ASTM Test Method	Value	Units
Strength to Weight Ratio	-	-	ksi
Specific Gravity @73 F	D792	1.82	-
Tensile Strength @73 F, (ult)/(yld)	D638	40,000	psi
Tensile Modulus of Elasticity @73 F	D638	-	psi
Tensile Elongation at Break @73 F	D638	-	%
Flexural Strength @73 F	D790	55,000	psi
Flexural Modulus of Elasticity @73 F	D790	2,700,000	psi
Shear Strength @73 F	D732	19,000	psi
Comprehensive Strength, (% Deformation) @73 F	D695	60,000 (10)	psi
Comprehensive Modulus of Elasticity @73 F	D695	-	psi
Hardness, Rockwell, Scale as noted @73 F	D785	M110	-
Hardness, Durometer, Shore D @73 F	D2240	-	-
Izod Impact, (Notched) @73 F	D256 Type A	7	ft-lb/in of notch
Coefficient of Friction, (Dry vs Steel) Dynamic	-	-	-
Limiting PV, (with 4 to 1 factor of safety applied)	-	-	psi-ft/min
Thermal	ASTM Test Method	Value	Units
Coefficient of Linear Thermal Expansion @73 F	E-831 (TMA)	-	in/in/F
Heat Deflection Temperature @264 psi	D648	-	F
Tg-Glass transition temperature, (Amorphous)	D3418	-	F
Melting Point, (VS=Vicat Softening Temp.)	D3418	-	F
Continuous Service Temperature in Air, (Max.)	-	285	F
Thermal Conductivity	-	-	BTU-in/hr-ft ² -F
Electric	ASTM Test Method	Value	Units
Dielectric Strength, Short Term	D149	400	Volts/mil
Volume Resistivity	D257	-	ohm-cm
Dielectric Constant @10E6 Hz	D150	5.2	-
Dissipation Factor @10E6 Hz	D150	0.025	-
Flammability @3.1 mm unless noted	UL94	V-0	-
H2O	ASTM Test Method	Value	Units
Water Absorption, Immersion, 24 hours	D570(7)	0.1	% by weight
Water Absorption, Saturation	D570(7)	-	% by weight