

GSG10



Globally Sourced G-10 Sheet Data Sheet

Definition: GSG10 is constructed from a woven glass fabric with an epoxy resin binder. This grade is not manufactured for a brominated epoxy resin and is not flame-retardant.

Characteristics: GSG10 exhibits extremely high mechanical strength (flexural, impact and bonding) at room temperature. Good dielectric loss and electric strength properties under both dry and humid conditions.

Certifications*: The manufactures of GSG10 has informed Norplex-Micarta that the product meets NEMA G-10, MIL-I-24768/2 and ASTM D 709 Type G-11.

TYPICAL PROPERTIES

GENERAL PHYSICAL PROPERTIES	Thickness	UNITS	VALUE
Izod Impact Strength Lengthwise – ASTM D229 E-48/50	0.125" and above	ft-lb/in	8.5
Izod Impact Strength Crosswise – ASTM D229 E-48/50	0.125" and above	ft-lb/in	7.5
Flexural Strength Lengthwise – ASTM D229 Condition A	0.031"	psi	65,000
	0.062"	psi	62,000
	0.125"	psi	60,000
Flexural Strength Crosswise – ASTM D229 Condition A	0.031"	psi	55,000
	0.062"	psi	52,000
	0.125"	psi	50,000
Bond Strength – ASTM D229 Condition A	0.500" and above	lb	2,200
Bond Strength – ASTM D229 D-48/50	0.500" and above	lb	1,700
Water Absorption – ASTM D229 D1-24/23	0.031"	%	0.40
	0.062"	%	0.25
	0.125"	%	0.15

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TYPICAL PROPERTIES

THERMAL & ELECTRICAL PROPERTIES	Thickness	UNITS	VALUE
Flammability Rating – U.L. 94 Condition A	0.031" and above	Class	HB
Breakdown Voltage – ASTM D229 Condition A	0.031" - 1.000"	kV	46
Breakdown Voltage – ASTM D-48/50	0.031" - 1.000"	kV	47
Permittivity @ 1 MHz – ASTM D229 Condition A	0.031" - 1.000"	-	4.8
Permittivity @ 1 MHz – ASTM D229 Condition D-24/23	0.031" and above	-	4.8
Permittivity @ 1 MHz – ASTM D229 Condition D-48/50	0.125"	-	4.9
Dissipation Factor @ 1 MHz – ASTM D229 Condition A	0.031" and above	-	0.020
Dissipation Factor @ 1 MHz – ASTM D229 D-24/23	0.031" and above	-	0.025
Dissipation Factor @ 1 MHz – ASTM D229 D-48/50	0.125"	-	0.030

* Product Certification. PRODUCT is import material, certified via manufacturers documentation to any standard under which it is sold. Norplex-Micarta, at its sole discretion, may substitute domestic or alternate source material in order to fill order requirements. Norplex-Micarta will have no obligation to notify customers of a change in material source. Substitution of PRODUCT does not wave any of these SUPPLEMENTAL TERMS. PRODUCT will not be tested lot by lot; therefore, neither section 4.5 of MIL-I-24768 nor section 13 of ASTM D709 will apply.

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