



Aurora Technologies

Material Data Sheet

Nema Grades GPO-1, GPO-2, and GPO-3

Description:

Grade GPO-1, GPO-2, and GPO-3 sheets are made from a mat of random-laid glass fibers that is saturated with polyester resin combined with suitable fillers, cured by applying heat and pressure.

Grade GPO-1 laminates are suitable for general-purpose applications. Grade GPO-2 laminates for applications where flame resistance is required, and GPO-3 laminates for applications where resistance to carbon tracking and flame resistance is required.

Typical Properties:

	<u>Units</u>	<u>GPO-1</u>	<u>GPO-2</u>	<u>GPO-3</u>
Physical				
Color	-	Tan	Red	Red
Specific Gravity	-	1.87	.84	1.83
Density	Lbs./cu. In.	.067	.065	.066
Water Absorption	%	.60	.20	.20
UL Flammability	Class	-	94V-O	94V-O
IEEE Temperature Class	C/Class	130/B	/B	130/B
Mechanical				
Tensile Strength	PSI	10,000	10,000	9,400
Flexural Strength	PSI	23,000	21,000	21,000
Compressive Strength	PSI	30,000	30,000	35,000
Shear Strength	PSI	14,000	14,000	18,000
Impact Strength,Izod,Edgewise	Ft.lbs/In.notch	8.0	8.0	8.0
Electrical				
Dielectric Strength				
-Perp. In oil	VPM	350	425	400
-Para. In oil	KV	54.0	60.0	55.0
Arc Resistance				
	Seconds	150	180	185
Dielectric Constant (60Hz)	-	4.80	4.40	4.73
Dielectric Constant (1MHz)	-	4.30	-	4.69
Dissipative Factor (60Hz)	-	.015	.031	.016
Dissipative Factor (1MHz)	-	.011	-	.011

**All of the properties listed above are typical values. These properties may vary based upon the manufacturer and environmental conditions. If specific criterion is to be met, then please contact one of our sales representatives for further evaluation.