



Epoxy Glass Laminates

Micarta[®]

NEMA Grade FR-4

Micarta[®] Grade H-22033

Product Description:

This is a medium strength low cost alternative to other glass-epoxy laminates. It is flame retardant and has good mechanical strength. Excellent machinability. Meets U.L. 94V-0 Flame Class

Applications: Test fixtures • Terminal boards • High humidity applications

Typical Properties:

Density	.069 lb/in ³	Water Absorption	.05%
Hardness (Rockwell)	109M	Bonding Strength	2,600psi
Compressive Strength (with grain)	60,000psi	Flexural Strength	69,000psi
Tensile Strength (with grain)	50,000psi	Impact Strength	12.0 ft-lb/in
Shear Strength (flatwise)	20,000psi	Volume Resistivity	6x10 ⁶
Dielectric Strength (perpendicular)	550vpm		

Plate	Micarta Grade	NEMA Grade	Specification Number & Type	Construction Resin & Substrate	Serv. Mech.	Temp °C Elec	Color
	H-22033	FR-4	MIL-I-24768/2/27-GEE,GEE-F	Epoxy/Glass	140	130	Natural/BLK
Grade H-22033		36" x 72"	36" x 48"	48" x 48"	48" x 96"	48" x 108"	
Nominal Thickness / ins		N/A	.031-5	.031-5	.031-5	.031-5	

NEMA Grade G-10

Micarta[®] Grade H-27092

Product Description:

This has a high flexural, impact and bond strength at room temperatures, has good electrical properties under dry and humid conditions, non-brominated resin system.

Applications:

- Components for power generation and transmission industry.

Typical Properties:

Density	.069 lb/in ³	Water Absorption	.05%
Hardness (Rockwell)	109M	Bonding Strength	2,600psi
Compressive Strength (with grain)	60,000psi	Flexural Strength	69,000psi
Tensile Strength (with grain)	50,000psi	Impact Strength	12.0 ft-lb/in
Shear Strength (flatwise)	20,000psi	Volume Resistivity	6x10 ⁶
Dielectric Strength (perpendicular)	550vpm		

Plate	Micarta Grade	NEMA Grade	Specification Number & Type	Construction Resin & Substrate	Serv. Mech.	Temp °C Elec	Color
	H-27092	G-10	MIL-I-24768/2/27-GEE	Epoxy/Glass	140	130	Natural
Grade H-27092		36" x 72"	36" x 48"	48" x 48"	48" x 96"	48" x 108"	
Nominal Thickness / ins		N/A	.031-5	.031-5	.031-5	.031-5	