



# THE GUND COMPANY

Manufacturers & fabricators of engineered material solutions

Item:	Mica M (Silicone Bonded Mica Paper Laminate)		
Description:	Silicone bonded Muscovite Mica is an alumino-silicate with exceptional physical, electrical, mechanical, and thermal characteristics. Mica M is primarily used in the area of high voltage and high temperature electrical insulation. It has been extremely useful as an asbestos replacement in high temperature applications.		
Availability:		English Units (in)	SI Units
	Laminate Sheets:	Thickness	0.010 to 2.5
		Sheet Sizes	98.4 x 41.3
	Fabricated Parts:	The Gund Company custom fabricates insulation materials to the exact specifications and drawings of our customers.	

Key Characteristics	Test Method	Units	Thickness	Typical Values
Apparent Density	ASTM D-792	lb/in <sup>3</sup> (g/cc)	.06"	.080 (2.22)
Water Absorption	ASTM D-570 D-24/23	%	.06"	.65
Tensile Strength	ASTM D-638 A	ksi (MPa)	.06"	28.3 (195)
Flexural Strength	ASTM D-790	ksi (MPa)	.06"	24.1 (166)
Compressive Strength	Room Temp.	ASTM D-695A	1"	57.5 (397)
	150 °C	ASTM D-695 <sup>1</sup>	1"	44 (304)
	200 °C			40.4 (279)
	288 °C			43.3 (299)
Flammability Test	UL 94	Class	.02"	V-O
Thermal Conductivity	at 23 °C	ASTM E-1461	.25"	.23
	at 250 °C			.21
Specific Heat	at 23 °C	ASTM E-1269	.25"	822
	at 250 °C			1081
Thermal Expansion *along plane	at 110 °C	ASTM E-228	.25"	10
	at 250 °C			28
Dielectric Strength	Room Temp.	ASTM D-149/ in oil	.04"	629 (24.53)
	1hr @ 400°C T-23°C			631 (24.61)
	1hr @ 600°C T-23°C			593 (23.13)
Heat Resistance	Continuous: 500 °C		Peak: 700 °C	