

THE GUND COMPANY

Manufacturers & fabricators of engineered material solutions

ltem:	Grade C-109/C-209: Semi-Conductive Glass Reinforced Laminate						
Description:	C-109/C-209 are semi-conductive glass reinforced laminates that are utilized as side-pack, side insulation in the stator slots of large rotating apparatus. As semi-conductive materials, C-109 and C-209 provide a pathway to dissipate partial discharge, static charges and flashovers to prevent the damaging effects f corona discharge.						
Availability:		C-109		C-209			
		English Units (in)	SI Units (mm)	English Units (in)	SI Units (mm)		
	Thickness:	0.020 to 0.5	0.5 to 9.52	0.008 to 0.5	0.2 to 12.7		
	Sheet Size:	36 x 72	914 x 1828	39 x 78	1000 x 1,981		
	Fabricated Parts:	The Gund Company custom fabricates insulation material to the specifications and drawings of our customers					

Koy Characteristics	Test Method	Units - English (SI)	Typical Values	
			C-109	C-209
Standard Color			Black	Black
Density		lb/in³ (g/cc)	0.054 (1.6)	0.033 (1.045)
Water Absorption (0.125")	ASTM D-570	%	0.5	0.58
Tensile Strength	ASTM D-638	psi (MPa)	16,500 (114)	35,000 (214)
Compressive Strength	ASTM D-695	psi (MPa)	42,000 (290)	58,000 (400)
Flexural Strength Length-Wise Cross-Wise	ASTM D-790	psi (MPa)	30,000 (207) 33,000 (228)	57,000 (393) 80,000 (550)
Shear Strength	ASTM D-732	psi (MPa)	17,000 (117)	21,000 (144)
Relative Temperature Index ¹	UL 746E	°C	180	180
IZOD Impact Strength, Notched	ASTM D-256	ft-lbs/in	14	LW: 13 CW: 8.5
Bond Strength	ASTM D-229	lb (kg)	850 (386)	920 (417)
Surface Resistivity	ASTM D-257	Ohms/Square	500-50,000	500-50,000

¹ Flexural Strength tested for determining mechanical RTI

All of the information, suggestions and recommendations pertaining to the properties and uses of the products herein are based upon tests and data believed to be accurate; however, the final determination regarding suitability of any material described herein for the use contemplated, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty, expressed or implied, including, without limitation warranty of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage. TGCR1015