



# Spaulding ENGINEERING DATA SHEET

## GRADE: SPAULDITE® G-3-789 LAMINATE SHEET

Spaldite® Grade G-3-789 is a glass base laminate using a phenolic resin designed for greater heat resistance and retention of strength at elevated temperatures.

Grade G-3-789 meets NEMA G-3 and Federal Specification L-P-509.

Application: Punched or mechanical parts requiring strength and heat stability – winding cards for potentiometers, etc.

### PROPERTY CHARACTERISTICS

PROPERTY	ASTM TEST METHOD	CONDITIONING & TYPE OF TEST	THICKNESS INCHES	AVERAGE TYPICAL VALUES		REFERENCE VALUES	
				ENGLISH	SI	ENGLISH	SI
<b>MECHANICAL</b>							
Bonding Strength	D-229	A	.500	1,500 lbs	6.67 kN	≥850 lbs	≥3.78 kN
Compressive Strength Flatwise	D-229	A	.125	50.0 ksi	344.7 MPa	NR	NR
Flexural Strength Flatwise	D-229	A			(MPa)		(MPa)
		Lengthwise	.125	67.0 ksi	461.9	≥40.0 ksi	≥275.8
		Crosswise	.125	56.0 ksi	386.1	≥30.0 ksi	≥206.8
Izod Impact Edgewise Notched	D-229	E-48/50					
		Lengthwise	.125	18.0 ft-lbs/in	.959 J/mm	≥6.5 ft-lbs/in	≥346 J/mm
		Crosswise	.125	10.0 ft-lbs/in	.533 J/mm	≥5.5 ft-lbs/in	≥293 J/mm
Tensile Strength	D-229	A			MPa		
		Lengthwise	.125	45.0 ksi	310.3	NR	NR
		Crosswise	.125	35.0 ksi	241.3	NR	NR
<b>PHYSICAL</b>							
Density	D-792	A	.125	.067 lbs/in <sup>3</sup>	1.85 g/cm <sup>3</sup>	NR	NR
Rockwell Hardness	D-229	A	.125	M105-115	M105-115	NR	NR
Water Absorption	D-229	D1-24/23	.125	.5%	.5%	≤2.0%	≤2.0%

*"To the best of our knowledge the information contained herein is accurate; however, Spaulding Composites Company, Inc. does not accept any liability regarding the accuracy or completeness of such information. Further, such information is based on standard base material and thus may change if the product ordered by purchaser requires further processing of base material by us and/or the purchaser. Purchaser has the sole responsibility in determining the suitability of any material described herein for the use contemplated and the processing of such material by purchaser."*