

## **Smith**Lamina<sup>™</sup>

G7

SmithLamina® G-7 materials are glass based laminates with a silicone resin binder. Glass silicone insulating materials offer excellent thermal resistance (up to 250°C) and arc resistance. These grades find application as electric furnace insulation, circuit breaker parts, switchboard panels, and arc barriers and also available in tubing.

In fabrication, care must be taken due to the low internal bond strengths inherent in silicone resins.

It exhibits excellent electrical properties, excellent heat resistance, outstanding arc resistance, and Self-extinguishing properties.

The main applications are Class H Transformers, Arc Plates, Terminal Boards, Microwave radar insulation, Spacers, wedges and all H class applications

## **Key Characteristics:**

Grade: NEMA LI-1 Grade G7 / IEC 60893 SI GC 202 / Hgw 2572

Standard Colour: WHITE

Specific Density: 1.80 - 2.00 Gm/cm3

Thickness: Standard Sizes:

## **TECHNICAL DATA**

Key Characteristics	Units	Typical Values
Rockwell Hardness (.062")	M Scale	100
Moisture Absorption (.062")	%	0.19
Flexural Strength (.25")		
CW-	psi (Mpa)	15000 (103)
LW-		18000(124)
IZOD Impact Strength		
CW-	ftlbs./in.	8.5
LW -		17.0
Arc Resistance (.125")	Seconds	200
Compressive Strength, Flat-wise	psi (Mpa)	45,000 (310)
Flammability Rating	Class	V-0
Breakdown Voltage (.062)		
(Both Parallel Step Method)	kV	55
Dielectric Strength	V/mil.	350
Permittivity (.062")	-	4.34
Dissipation Factor (.062")	-	0.0017

All values are attributes of the used raw materials.

The physical data contained in this table are typical values. They are obtained on test specimens under specific conditions and represent average values of a large number of tests. The results obtained on these tests specimens cannot be applied to finished parts without reservations, as behaviour is influenced by processing and shaping.