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## B48 Product Data Sheet

### Material Details

<b>Grade:</b>	B48. (Type: Glass Based Laminates - SRBG)
<b>Description:</b>	Epoxy Glass. Epoxy glass laminate, Similar to B36 - elevated mechanicals at temperature.
<b>Comments:</b>	Similar to B36 but with enhanced mechanical properties at elevated temperatures. Thermal Class H (180 deg C). Improved flexural strength at 150 deg C after heat ageing. Uses include high speed rotating machinery and applications where improved heat distortion characteristics are important.
<b>Specifications:</b>	BSEN60893-3-2-EPGC308 (Which supersedes BS3953 EP7). The closest NEMA equivalent to this specification is NEMA G11.
<b>Body Colour:</b>	Green/Brown
<b>Cover Colour:</b>	Green/Brown
<b>Standard Finish:</b>	Satin/Glossy
<b>Size:</b>	1220 x 1220 Thickness Range: 0.4 - 100.0 †

### Typical Applications

- Transformer Spacers
- Terminal Boards and Tag Strips
- Slot Wedges
- Precision Machined Parts
- Pipeline Insulation
- Phase Barriers
- Insulating Bushes Spacers Sleeves
- High Voltage Insulation
- High Temperature Components
- Electromagnetic Coil Insulation
- Cryogenic Resistance Components
- Chemical Resistance Components

### General Properties

Property	Unit of measure	Typical Value
Density	g/cm <sup>3</sup>	1.9
Water Absorption	mg	10

† Where relevant, the flammability test method is used solely to control and monitor consistency of production. Under no conditions should the results be considered in relation to fire hazards under actual conditions of use.

## Electrical Properties

Property	Unit of measure	Typical Value
IR (24hrs Water Immersed)	G □	30000
IR (Dry)	G □	30000
Electric Strength (Flat Rapid)	kV/mm	17
Breakdown Voltage (Edge Step by Step)	kV	80
Relative Permittivity @ 1 MHz	-	5
Dissipation Factor @ 1 MHz	-	0.02
Tracking Index	V	220

## Mechanical Properties

Property	Unit of measure	Typical Value
Flexural Strength	MPa	490
Flexural Strength at 150°C	MPa	350
Tensile Strength	MPa	230
Impact (Notched CHARPY)	kJ/m2	80

## Thermal Properties

Property	Unit of measure	Typical Value
Thermal Rating Continuous	°C	180
Thermal Rating Intermittent	°C	190

## Notes

- Datasheet Issue No. 3

Disclaimer: The above values are based upon routine test data and do not form the basis of a supply contract. These products may be used in a diverse range of applications and whilst every effort is made to ensure the information in this data sheet is accurate, it must be stressed that it is the user's responsibility to ensure suitability for the intended end use.

Source: <https://www.attwater.com/products/b48/>