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## B46 Product Data Sheet

### Material Details

<b>Grade:</b>	B46. (Type: Glass Based Laminates - SRBG)
<b>Description:</b>	Epoxy Glass. Epoxy glass laminate with improved machinability
<b>Comments:</b>	General purpose Epoxy glass laminate. Temperature class B (130 C), with good mechanical and electrical properties at moderate cost. Similar to G10 with a modified resin system to improve machinability.
<b>Specifications:</b>	BSEN60893-3-2-EPGC201 (Which supersedes BS3953 EP3). The closest NEMA equivalent to this specification is NEMA G10.
<b>Body Colour:</b>	Pale Green
<b>Cover Colour:</b>	Pale Green
<b>Standard Finish:</b>	Satin/Glossy
<b>Size:</b>	1220 x 1220 Thickness Range: 0.4 - 150.0 †

### Typical Applications

- Transformer Spacers
- Track Resistance
- Precision Machined Parts
- Phase Barriers
- Mechanical Applications
- High Voltage Insulation
- Electromechanical Machining Jigs
- Cryogenic Resistance Components
- Coil Formers
- Chemical Resistance Components
- Bolts and Screws

### General Properties

Property	Unit of measure	Typical Value
Density	g/cm <sup>3</sup>	1.9
Water Absorption	mg	9

† 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	15
Breakdown Voltage (Edge Step by Step)	kV	75
Relative Permittivity @ 1 MHz	-	4.8
Dissipation Factor @ 1 MHz	-	0.02
Tracking Index	V	210

## Mechanical Properties

Property	Unit of measure	Typical Value
Flexural Strength	MPa	485
Tensile Strength	MPa	210
Impact (Notched CHARPY)	kJ/m <sup>2</sup>	55

## Thermal Properties

Property	Unit of measure	Typical Value
Thermal Rating Continuous	°C	120
Thermal Rating Intermittent	°C	130

## Notes

- Datasheet Issue No. 1

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/b46/>