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B34 Product Data Sheet

Material Details

| | |
|-------------------------|---|
| Grade: | B34. (Type: Glass Based Laminates - SRBG) |
| Description: | Polyimide Glass. High temperature high strength |
| Comments: | High temperature, high performance laminates developed for applications where good dimensional stability, electrical / mechanical strength and rigidity are required at elevated temperatures. Capable of long-term use at 200 deg C and intermittent use at higher temperatures. |
| Specifications: | BSEN60893-3-7-PIGC301 (Which supersedes BS3953 PI1). |
| Body Colour: | Dark Brown |
| Cover Colour: | Dark Brown |
| Standard Finish: | Matt |
| Size: | 1220 x 1220 Thickness Range: 0.4 - 100.0 † |

Typical Applications

- Welding Jigs
- Thermal Splash Barriers
- Slot Wedges
- Precision Machined Parts
- Mechanical Applications
- Jigs and Fixtures
- High Temperature Components
- Chemical Resistance Components

General Properties

| Property | Unit of measure | Typical Value |
|------------------------|-----------------|---------------|
| Density | g/cm3 | 2 |
| Water Absorption | mg | 34 |
| Flammability Category¥ | - | FV0 |

¥ 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 □ | 6000 |
| IR (Dry) | G □ | 6000 |
| Electric Strength (Flat Rapid) | MV/m | 15 |
| Breakdown Voltage (Edge Step by Step) | kV | 92 |
| Relative Permittivity @ 1 MHz | - | 5.4 |
| Dissipation Factor @ 1 MHz | - | 0.025 |
| Tracking Index | V | 165 |

Mechanical Properties

| Property | Unit of measure | Typical Value |
|----------------------------|-----------------|---------------|
| Flexural Strength | MPa | 540 |
| Flexural Strength at 150°C | MPa | 350 |
| Tensile Strength | MPa | 350 |
| Impact (Notched CHARPY) | kJ/m2 | 80 |

Thermal Properties

| Property | Unit of measure | Typical Value |
|-----------------------------|-----------------|---------------|
| Thermal Rating Continuous | °C | 200 |
| Thermal Rating Intermittent | °C | 250 |

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/b34/>