

Description

Polyimide is a thin, semitransparent material with excellent dielectric strength. It is also resistant to most chemicals, acid and bases.

The temperature range is between as low as -271°C (liquid helium) and as high as 200°C. If requested we have the possibility to integrate components like thermistors, sensors and IC's.

Technical specifications

Max. element temperature	+200°C (392°F)
Min. element temperature	-271°C (-456°F)
Dielectric strength at 20°C as per ASTM KV/mm	205
Thermal conductivity at 100°C (W/m-K)	0,12
Moisture absorption per ASTM D-570-63 (24 hr immersion at 23°C)	2,8%
Waterproof per IEC 335-1 sect. 15-16	No
Dielectric constant at 25°C, 50 Hz	3,5
Min. bend radius	1mm
Max. element width	610mm
Power density	1,3 W/cm ² (appl. dependent)
Resistance tolerance	Standard $\pm 10\%$ of nominal Optional up to $\pm 2\%$
Rated voltage	Up to 1000VAC/VDC single or 3 phase.

Etched elements

Benefits

- High and low temperature range
- Excellent dielectric strength
- Good chemical resistance
- Integrated components possible

Markets

- Military/aerospace, where low outgassing properties are required
- Medical diagnostic instruments, where autoclave cleaning or sterilization is needed
- photographic equipment
- LCD displays
- Laboratory research



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