

FEATURES

- Rigid mica plastic film sheets
- Resistance to temperatures of over 500°C
- Dielectric strength of 25 kV/mm
- Density of 2.15g/cm³
- Environmentally safe and non-toxic plastic film
- Length of 304 mm
- Width of 200 mm
- Thickness of 1 mm

Mica Plastic Film, 304mm x 200mm x 1mm

RS Stock No.: 785-0827



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

Provide stable electrical insulation at temperatures higher than +500°C with this mica plastic film. Durable and flexible, this sheet of laminate plastic film is straightforward to work with as it can be easily cut or punched.

The electrical insulating film has an unlimited shelf life if stored at room temperature and kept dry. It's also non-toxic and environmentally friendly. With a layered construction, this sheet of thin film is supple, water-resistant and lightweight. As a blister-free, low-smoke grade of film, it's resistant to flames, extreme heat and abrasion as it has excellent thermal properties and tensile strength, making it a safe and suitable choice to use in high-temperature environments.

General Specifications

Material	Mica
Flame Retardant	V-0
Application	Electrical. A special low smoke and blister free grade. It fully resists the extreme high temperature cycles and can be easily cut or punched.

Electrical Specifications

Dielectric Strength	25kV/mm
Insulation Resistance 23°C	>10 ¹⁷ Ω.cm
Insulation Resistance 550°C	>10 ¹² Ω.cm

Mechanical Specifications

Length	304mm
Width	200mm
Thickness	1mm
Density	2.15g/cm ³
Edge Strength	>1.3kg/0.1mm
Tensile Strength	150N.mm ⁻²
Flexural Strength	>180N.mm ⁻²
Water Absorption	<1%

Operation Environment Specifications

Maximum Operating Temperature	500°C
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Approvals

Compliance/Certifications	RoHS (Restriction of Hazardous Substances) Compliant, UL 94 V-0, IEC 371-3-3
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Characteristics

Type		Mica	
Mica content	%	ca.90	IEC 371-2
Bond content	%	ca.90	IEC371-2
Thickness	mm	0.2	IEC 371-2
Density		2.15 ± 0.15	IEC371-2
Heat Resistance			
Continuous service	°C	500	
Intermittent service	°C	800	
Edge Strength	Kg/0.1 mm	>1.3	in house
Tensile Strength	N.mm-2	150	ISO 527
Flexural Strength	N.mm-2	>180	ISO178
Water absorption	%	<1	IS 62
Dielectric Strength	KV/mm	>25	IEC243
Insulation Resistance 23°C	Ω.cm	>10 ¹⁷	IEC 93
Insulation resistance 550°C	Ω.cm	>10 ¹²	IEC 93
Heat Loss at 500°C	%	<1	IEC 371-2
Thermal Expansion			
Perpendicular to Layer	10 ⁻⁶ K-1	100	
I parallel to Layer	10 ⁻⁶ K-1	10	