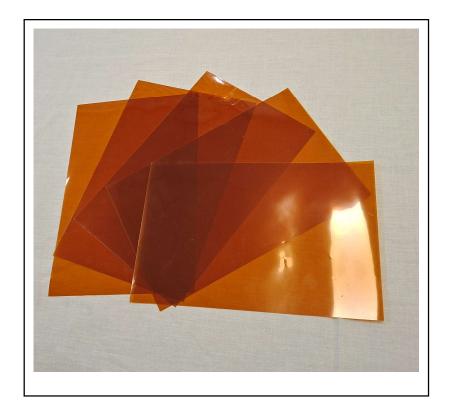


Features

- High Temperature Resistance
- Excellent Dielectric Strength
- Limited Thermal Shrinkage
- Excellent Thermal Insulator
- Pack of 5 sheets

HN THERMAL INSULATING FILM 304 X 200 X 0.050MM

RS Stock No.: 0588683



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 Page 1 of 3

Plastic Film



This general-purpose film has been used successfully in applications at temperatures as low as -269°C (-452°F) and as high as 400°C (752°F). HN film can be laminated, metallized, punched, formed or adhesive coated. It is the recommended choice for applications that require an all-polyimide film with an excellent balance of properties over a wide range of temperatures.

Can be used for Mechanical Parts, Electronic Parts, Electrical Insulation, Pressure Sensitive Tapes, Diaphragms, Manifolds, Etching and Shims

General Specifications

Density	1.42 g/cm ³
Sheet/Pack Size	304 x 200mm, 5 sheets per pack
Material	HN THERMAL INSULATING FILM
Length	304mm
Width	200mm
Thickness	0.050mm

Mechanical Specifications

Ultimate Tensile Strength	33,500 psi
Ultimate Elongation	72%
Tensile Modulus	400,000 psi
Coefficient of Friction, kinetic	0.48
Coefficient of Friction, static	0.63
Refractive Index	1.7
Poisson's Ratio	0.34

Electrical Specifications

Dielectric Strength	240 V/um kV/mm (6100 V/mil)
Dielectric Constant	3.4
Dissipation Factor	0.0020
Volume Resistivity	$1.5 \times 10^{17} \Omega \cdot \text{cm}^{17}$

Thermal Properties

Plastic Film



Melting Point	None
Thermal Coefficient of Linear Expansion	20 ppm/°C
Coefficient of Thermal Conductivity	0.20 W/mK
Specific Heat	1.09 J/gK
Heat Sealability	Not heat sealable
Solder Float	Pass
Smoke Generation	D _m =<1
Shrinkage 30 min at 150°C 120 min at 400°C	0.17 % 1.25 %
Limiting Oxygen Index	37-45%

Approvals

Declarations	MFR Declaration of Conformity
Standards Met	ASTM D5213 (type 1, item A) requirements

Similar Products

Stock No.	Brand	Product Name	Thickness (mm)	Thickness (mil)
0588682	RS PRO	HN THERMAL INSULATING FILM 304 X 200 X 0.025MM	0.025mm	1 mil
0588684	RS PRO	HN THERMAL INSULATING FILM 304 X 200 X 0.050MM	0.050mm	2 mil
0588684	RS PRO	HN THERMAL INSULATING FILM 304 X 200 X 0.075MM	0.075mm	3 mil