



DATA SHEET

ROLLS

K-6050

POLYIMIDE FILM

Type - 6050



Polyimide film is Polyimide Polycondensate by polycondensing PDMA and DDE through the process of forming film in strong solvents and then being treated by imine at high temperature. Such film possess excellent physical, chemical and electrical properties, which performs successfully in a wide range of temperature as low as -452F(-269°C) and as high as +436F(+260°C) and can be exposed at +752F(400°C) for short time periods. It also exhibits resistance to atomic radiation.

Polyimide film is currently the macromolecular compound with the best combined properties and the highest heat resistance. It is widely used for electric magnet wire and cable coiling, motor slot liners, transformer interlayer insulation, the backing material of pressure sensitive adhesive tape, F46(FEP) and the substrates of Flexible Printed Circuit Boards (F-PCB).

Main technical requirements

Properties	Units	Values			Typical Values
		25,50 μm	75μm	100μm	
Density	-	1.42 + 0.02			1.42 + 0.02
Tensile strength MD	MPa	min 135			165
Tensile strength TD	MPa	min 115			165
Elongation	%	min 35			60
Shrinkage 150 °C	%	max 1.0			-
Shrinkage 400 °C	%	max 3.0			-
Breakdown strength 50Hz	MV/m	min 150	min 130	min 110	min 170
Surface resistivity 200°C	Ω	min 1.0x10 ¹³			min 1.0x10 ¹³
Volume resistivity	Ω.m	min 1.0x10 ¹⁰			min 3.8x10 ¹⁰
Dielectric Constant 50Hz	-	3.5 + 0.4			3.2
200 °C Loss tangent 48-62 Hz	-	max 4.0x10 ⁻³			max 1.8x10 ⁻³

Standard No. JB/T2726-1996

Size:

Width : 500, 520, 1000mm, or custom widths

Thickness : 0.025mm, 0.05mm, 0.075mm, 0.100 mm, 0.125mm – Tolerance +10%



Temperature Rating