



Polyimide film

Polyimide films for thermal management combine a set of unique thermal, thermo- optical, electrical and mechanical properties. The films are stable up to 350 °C and retain most of their useful properties over a wide temperature range, even at low temperatures. They offer a very high electrical resistance and are chemically stable in many common organic solvents and weak acids. These polyimide films are currently available in 20 cm* 30 cm size without any adhesive.

	Physical Properties	Value	Units
1	Chemical Name	Polyimide	-
2	Film Thickness	25±2	µm
3	Density	1.42	g.cm-3
	Electrical Properties	Value	Units
4	Sheet Resistance	> 1011	Ω/□
	Thermal Properties	Value	Units
5	Temperature Stability	> 350	°C
6	Thermal Conductivity	0.2	W.m-1 K-1
	Mechanical Properties	Value	Units
7	Tensile Strength	95 ± 8	MPa
8	Elongation	12 ± 5	%
	Chemical Properties	Value	Units
9	Moisture Absorption	2.5	%
	Thermo-optical properties	Value	Units
10	Solar Reflectance	0.13	-
11	Solar Transmittance	0.78	-
12	Solar Absorptance	0.09	-
13	Infrared emittance: Low emitting surface	0.67	-
14	Infrared emittance: High emitting surface	0.85	-
	Outgassing Properties	Value	Units
15	Collected Volatile Condensable Material (CVCM)	0.001	%
16	Recovered Mass Loss (RML)	0.266	%
17	Total Mass Loss (TML)	1.890	%
18	Water Vapour Release (WVR)	1.624	%