

Polyimide insulating film

Product description	Polyimide insulating film (PI film) is a high-performance film insulating material, which is made of polycondensation and casting of polyphthalic anhydride (PMDA) and diaminyldiphenyl ether (DDE) in a highly polar solvent, and then imidized. It has excellent heat resistance, high tensile strength, good chemical stability, good radiation resistance and good dielectric properties.				
Product application	1.Insulation materials: motor and nuclear power equipment insulation, high-temperature resistant wires and cables, magnet wires, high-temperature resistant wires, high-temperature pressure-sensitive tapes, insulating composite materials, etc. 2.Semiconductor and microelectronics industry: passivation layer and buffer inner coating of microelectronic devices, interlayer dielectric materials for multilayer metal interconnection circuits, and important substrates for photoelectric printed circuit boards. 3.Electronic label field: motherboards of printed circuit boards, corrosion products, mobile phones and lithium batteries and other products.				
properties					
Product model Technicl Parameters	P68025	P68050	P68075	P6810	P68125
Color	brown	brown	brown	brown	brown
Base material	PI	PI	PI	PI	PI
Total thickness [mm]	0.025±0.003	0.05±0.003	0.075±0.003	0.1±0.003	0.125±0.003
Tensile strength [Mpa]	≥205	≥135	≥135	≥115	≥115
Elongation at break [%]	≥70	≥35	≥35	≥35	≥35
Withstand voltage (50Hz) [MV/m]	≥235	≥160	≥160	≥160	≥160
Volume resistance 250±5℃ [Ω.mm]	≥1.0×10 ¹⁰	≥1.0×10 ¹⁰	≥1.0×10 ¹⁰	≥1.0×10 ¹⁰	≥1.0×10 ¹⁰
Surface resistance 250±5° C [Ω]	≥1.0×10 ¹⁴	≥1.0×10 ¹³	≥1.0×10 ¹³	≥1.0×10 ¹⁴	≥1.0×10 ¹⁴
Dielectric constant (50Hz)	3.5-4	3.5-4	3.5-4	3.5-4	3.5-4
Storage and shelf life	It is recommended to store in a clean and dry place, away from direct sunlight to prevent damage to the packaging, and to avoid storing with volatile solvents. Store at 25±5° C and humidity at 50±5%.				