THE GUND COMPANY

Manufacturers & fabricators of engineered material solutions

Item:	Kapton™ Polyimide Film		
Description:	Kapton™ Polyimide Film possesses a unique combination of properties previously unavailable among polymeric film materials. The ability of Kapton to maintain its excellent physical, electrical, and mechanical properties over a wide temperature range has opened new design and application areas to plastic films. Kapton has proven to be especially useful in applications involving high operating temperatures.		
Availability:		Kapton: Type HN	Kapton: Type VN
	Laminate Sheets - Gauges:	30, 50, 100, 200, 300, 500	50, 75, 100, 200, 300, 500
	Fabricated Parts:	The Gund Company custom fabricates insulation materials to the exact specifications and drawings of our customers.	

Key Characteristics	Units English (SI)	Typical HN Film Thickness (mils)					
		.30	.50	1.00	2.00	3.00	5.00
Tensile Strength, 23°C	psi (MPa)	16,000 (110)	20,000 (138)	20,000 (138)	24,000 (165)	24,000 (165)	24,000 (165)
Elongation	%	25	35	40	45	50	50
Shrinkage	%	4.0	4.0	2.5	2.5	2.5	2.5
Moisture Absorption	%	4.0	4.0	4.0	4.0	4.0	4.0
Dielectric Strength	V/mil (kV/mm)	3,000 (117)	3,000 (117)	6,000 (234)	5,000 (195)	5,400 (211)	3,000 (117)
Volume Resistivity	Ohm x cm	10^{12}	10^{12}	10^{12}	10^{12}	10^{12}	10^{12}
Dielectric Constant, 1 kHz	--	4.0	4.0	3.9	3.9	3.9	3.9
Dissipation Factor, 1 kHz	--	0.007	0.005	0.0036	0.0036	0.0036	0.0036

Key Characteristics	Units English (SI)	Typical VN Film Thickness (mils)					
		.50	.75	1.00	2.00	3.00	5.00
Tensile Strength, 23°C	psi (MPa)	20,000 (138)	20,000 (138)	20,000 (138)	20,000 (138)	20,000 (138)	20,000 (138)
Elongation	%	35	35	45	50	60	60
Shrinkage	%	0.1	0.1	0.1	0.05	0.05	0.05
Moisture Absorption	%	4.0	4.0	4.0	4.0	4.0	4.0
Dielectric Strength	V/mil (kV/mm)	3,000 (117)	3,000 (117)	3,000 (117)	3,000 (117)	3,000 (117)	3,000 (117)
Volume Resistivity	Ohm x cm	10^{12}	10^{12}	10^{12}	10^{12}	10^{12}	10^{12}
Dielectric Constant, 1 kHz	--	3.9	3.9	3.9	3.9	3.9	3.9
Dissipation Factor, 1 kHz	--	0.005	0.005	0.0036	0.0036	0.0036	0.0036