

Standard Films: Keratherm Green



This silicone elastomer film filled with aluminum oxide is characterized by its excellent electrical characteristics. It exhibits good thermal behavior. Optional fiberglass reinforcement leads to very good mechanical properties.

APPLICATIONS

- Automotives
- Telecommunication Units
- High Voltage Units
- DC-DC Converters

DISCLAIMER: Purchaser shall be solely responsible for determining the adequacy of the product for any and all uses which the purchaser shall apply the product, and the application of the product by the purchaser shall not be subject to any implied warranty of fitness for that purpose.

Properties	symbol	unit	86/37 Basic film
Color			green
Thermal Properties			
Thermal Resistance	R_{th}	K/W	0.28
Thermal Impedance	R_{ti}	$^{\circ}Cmm^2/W$ Kin^2/W	125 0.19
Thermal Conductivity	λ	W/mK	1.8
Electrical Properties			
Breakdown Voltage	$U_{d;ac}$	kV	8.0
Dielectric Breakdown	$E_{d;ac}$	KV/mm	26
Volume Resistivity		Ωcm	2.5×10^{11}
Dielectric Loss Factor	$\tan \delta$	1	6.0×10^{-3}
Dielectric Constant	ϵ_r	1	2.9
Mechanical Properties			
Overall Thickness ($\pm 10\%$)		mm	0.225
Hardness		Shore A	69
Tensile Strength		N/mm ²	3.0
Elongation		%	75
Physical Properties			
Application Temperature		$^{\circ}C$	-60 to +250
Density		g/cm ³	2.4
Flame class		UL	94V-0

These film types possess excellent mechanical stability along with good perforation strength. Because of its structure Keratherm[®] green has extremely good self-adhesive properties. Adhesive coatings are available.

Options for Keratherm Green (Standard Film):

Type	Film Structure	Overall Thickness	Tensile Strength	Thermal Resistance	
		mm	N/mm ²	K/W	Kin ² /W
86/17	86/37 with fiberglass	0.225	15	0.59	0.23
86/27	86/37 with fiberglass and adhesive coating	0.250	15	0.61	0.26
86/47	86/37 with adhesive coating	0.250	3.0	0.56	0.20

The following thicknesses are available: 0.125 mm, 0.225 mm, 0.3 mm, 0.4 mm, 0.5 mm