

Datasheet

# Keratherm® - green standard films

**Applications:**

- Automotives
- Telecommunication units
- High voltage units
- DC-DC converters



Properties	Unit	86/37 basic film
Color		green
<b>Thermal properties</b>		
Thermal resistance $R_{th}$	K/W	0.28
Thermal impedance $R_{ti}$	$^{\circ}Cmm^2/W$ $Kin^2/W$	125 0.19
Thermal conductivity $\lambda$	W/mK	1.8
<b>Electrical properties</b>		
Breakdown voltage $U_{d; ac}$	kV	8.0
Dielectric breakdown $E_{d; ac}$	KV/mm	26
Volume resistivity	$\Omega cm$	$2.5 \times 10^{11}$
Dielectric loss factor $\tan d$		$6.0 \times 10^{-3}$
Dielectric constant $\epsilon_r$		2.9
<b>Mechanical properties</b>		
Overall thickness (+/-10%)	mm	0.225
Hardness	Shore A	69
Tensile strength	N/mm <sup>2</sup>	3,0
Elongation	%	75
<b>Physical properties</b>		
Application temperature	$^{\circ}C$	-60 to +250
Density	$g/cm^3$	2.4
Flameclass	UL	94V-0

This silicone elastomer film filled with aluminium oxide is characterized by its excellent electrical characteristics. It exhibits good thermal behavior. Optional fibre glass reinforcement leads to very good mechanical properties. 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 mm	Tensile strength N/mm <sup>2</sup>	Thermal resistance	
				K/W	$Kin^2/W$
86/17	86/37 with fibre glass	0.225	15	0.59	0.23
86/27	86/37 with fibre glass 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;