

## Keratherm® - white Standard films

### Applications:

- Power supplies
- Audio- and video components
- White Goods
- Power Converters (AC-DC, DC-DC)
- Engine controllers



Properties	Unit	86/30 basic film
Colour		white
<b>Thermal properties</b>		
Thermal resistance $R_{th}$	K/W	0.22
Thermal impedance $R_{ti}$	$^{\circ}\text{Cmm}^2/\text{W}$	90
	$\text{Kin}^2/\text{W}$	0.13
Thermal conductivity	W/mK	2.5
<b>Electrical properties</b>		
Breakdown voltage $U_{d, ac}$	kV	1.5
Dielectric breakdown $E_{d, ac}$	KV/mm	7.0
Volume resistivity	m	$2.5 \times 10^{11}$
Dielectric loss factor tan	1	$2.2 \times 10^{-2}$
Dielectric constant $\epsilon_r$	1	3.0
<b>Mechanical properties</b>		
Measured thickness (+/-10%)	mm	0.225
Hardness	Shore A	75
Tensile strength	N/mm <sup>2</sup>	2.0
Elongation	%	31
<b>Physical properties</b>		
Application temperature	$^{\circ}\text{C}$	-60 to +250
Density	g/cm <sup>3</sup>	2.4
Flameclass	UL	94V-0

The following thicknesses are available:  
0,125 mm; 0,225 mm; 0,3 mm; 0,4 mm; 0,5 mm

The highly thermal conductive white group, with its well-balanced thermal, electrical and dielectric behaviour, is created by filling a silicone elastomer base with aluminum oxide. An increase in mechanical strength can be achieved by fibre glass reinforcement. Both unreinforced and reinforced film types can optionally be supplied with an adhesive coating. In general however, the very good self-adhesion of the film will be sufficient for most mounting required.

### Options for Keratherm® -white

Type	Film structure	Overall thickness mm	Tensile strength N/mm <sup>2</sup>	Thermal resistance	
				K/W	Kin <sup>2</sup> /W
86/10	86/30 with fibre glass	0.225	15	0.30	0.15
86/20	86/30 with fibre glass and adhesive coating	0.250	15	0.49	0.19
86/40	86/30 with adhesive coating	0.250	2.0	0.37	0.17

### Compressibilities of Keratherm® White

