

Keratherm® - silicone free Standard films

Applications:

- Medical applications
- Laser equipment
- Lighting systems
- CD-Rom drives
- Aero units
- Space units

Properties	Unit	U 23	U 80	U 90
Colour		white	light blue	blue
Thermal properties				
Thermal resistance R_{th}	K/W	0.52	0.20	0.09
Thermal impedance R_{ti}	$^{\circ}\text{Cmm}^2/\text{W}$	208	73	32.9
	Kin^2/W	0.32	0.11	0.05
Thermal conductivity λ	W/mK	1.2	1.8	6.0
Electrical properties				
Breakdown voltage $U_{d; ac}$	kV	9.0	4.0	4.0
Volume resistivity	Ωcm	4.9×10^{11}	1.44×10^{14}	2.0×10^{11}
Dielectric loss factor $\tan \delta$	1	8.0×10^{-2}	13.0×10^{-3}	13.7×10^{-3}
Dielectric constant $\hat{\epsilon}$	1	1.7	3.2	3.10
Mechanical properties				
Overall thickness (+/-10%)	mm	0.250	0.150	0.200
Hardness	Shore A	85	85	70
Tensile strength	N/mm ²	5.0	3.0	2.5
Elongation	%	250	130	150
Physical properties				
Density	g/cm ³	2.32	2.90	1.73
Application temperature	$^{\circ}\text{C}$	-40 to +90	-40 to +125	-40 to +125

Optional available with adhesive coating!



In case of concerns about using silicones, we offer you a ceramic-filled polyurethane film as an alternative material. Besides good thermal and outstanding electrical properties, these films are characterized by very good perforation strength.

These good physical properties are matched with an excellent price-performance ratio.

Thickness U23: 0,125 mm; 0,250 mm; 0,3 mm; 0,4 mm; 0,5 mm

Thickness U80: 0,15 mm; 0,3 mm

Thickness U90: 0,1 mm; 0,2 mm