

Keratherm Silicone Free



In case of concerns about using silicones, we offer you a ceramic filled polyurethane film as an alternative material.

APPLICATIONS

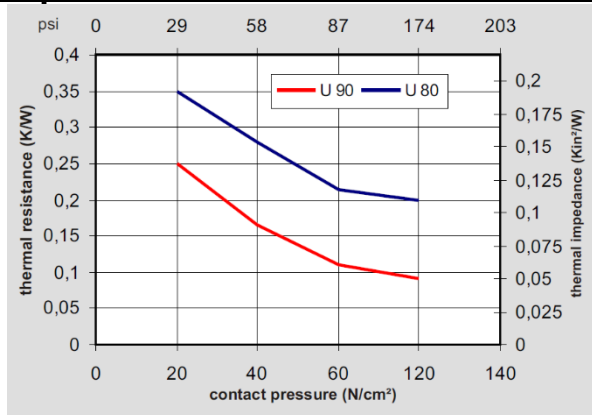
- Medical Applications
- Laser Equipment
- Space Units
- Lighting Systems
- Aero Units
- CD-ROM Drives

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	U 23	U 80	U 90
Color			white	blue	light blue
Thermal Properties					
Thermal Resistance	R_{th}	K/W	0.52	0.20	0.09
Thermal Impedance	R_{ti}	$^{\circ}Cmm^2/W$ Kin^2/W	208 0.32	73 0.11	32.9 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
Dielectric Breakdown	$E_{d;ac}$	kV/mm	25	25	25
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	ϵ_r	1	1.7	3.2	3.10
Mechanical Properties					
Overall Thickness ($\pm 10\%$)		mm	0.250	0.150	0.200
Hardness		Shore A	80 - 95	80 - 90	65 - 75
Tensile Strength		N/mm ²	5.0	3.0	2.5
Elongation		%	250	130	150
Physical Properties					
Application Temperature		$^{\circ}C$	-40 to +90	-40 to +125	
Density		g/cm ³	1.36	2.26	1.46
Flame Rating (E 140693)		UL	-	94V-0	94V-0
Possible Thickness		mm	0.125 - 0.3	0.15 - 0.3	0.1 - 0.3

Optional available with adhesive coating!

Compressibilities of Softherm® U 80 & U 90



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.

The following thicknesses are available:

- U 23** - 0.125 mm, 0.250 mm, 0.3 mm, 0.4 mm and 0.5 mm
- U 80** - 0.15 mm, 0.3 mm
- U 90** - 0.1 mm, 0.2 mm