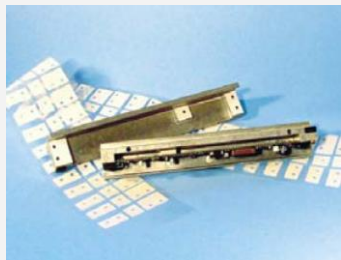


## Keratherm Silicone Free



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

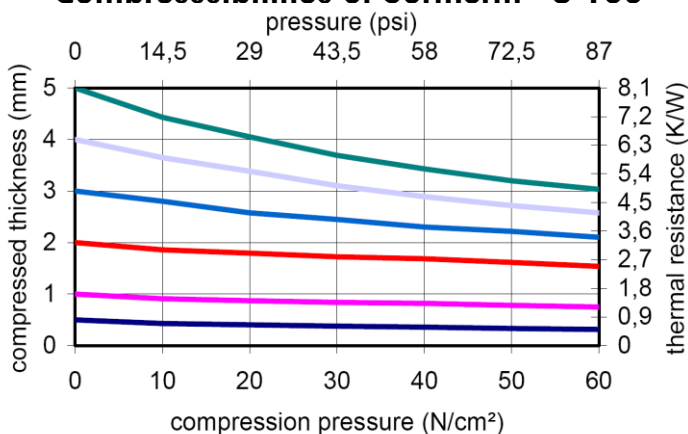
### APPLICATIONS

- 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	Softtherm U 100
Color			white	light blue	blue	blue
<b>Thermal Properties</b>						
Thermal Resistance	$R_{th}$	K/W	0.52	0.20	0.09	0.80
Thermal Impedance	$R_{ti}$	$^{\circ}Cmm^2/W$	208	73	32.9	292
		$Kin^2/W$	0.32	0.11	0.05	0.57
Thermal Conductivity	$\lambda$	W/mK	1.2	1.8	6.0	1.2
<b>Electrical Properties</b>						
Breakdown Voltage	$U_{d,ac}$	kV	9.0	4.0	4.0	4.0
Volume Resistivity		$\Omega cm$	$4.9 \times 10^{11}$	$1.44 \times 10^{14}$	in test	-
Dielectric Loss Factor	$\tan \delta$	1	$8.0 \times 10^{-2}$	$13.0 \times 10^{-3}$	in test	$8.0 \times 10^{-3}$
Dielectric Constant	$\epsilon_r$	1	1.7	3.2	in test	3.5
<b>Mechanical Properties</b>						
Overall Thickness ( $\pm 10\%$ )		mm	0.225	0.150	0.200	0.500
Hardness		Shore A	85	85	70	45
Tensile Strength		N/mm <sup>2</sup>	5.0	3.0	2.5	-
Elongation		%	250	130	150	-
Youngs Modulus		N/cm <sup>2</sup>	-	-	-	1,017
<b>Physical Properties</b>						
Application Temperature		$^{\circ}C$	-40 to +90	-40 to +125	-40 to +125	-40 to +125
Density		g/cm <sup>3</sup>	2.32	2.90	1.73	2.30

### Compressibilities of Softtherm® U 100



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
- U 100** - 0.5 mm to 5 mm