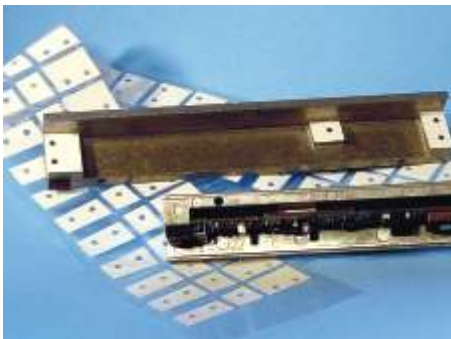


Datasheet

Keratherm[®] - silicone free Standard films

Applications:

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



| Properties | Unit | U 23 basic film | U 80 |
|-------------------------------|---------------------------------|----------------------|-----------------------|
| Color | | white | light blue |
| Thermal properties | | | |
| Thermal resistance R_{th} | K/W | 0.52 | 0.20 |
| Thermal impedance R_{ti} | $^{\circ}\text{Cmm}^2/\text{W}$ | 208 | 73 |
| | Kin^2/W | 0.32 | 0.11 |
| Thermal conductivity | W/mK | 1.2 | 1.8 |
| Electrical properties | | | |
| Breakdown voltage $U_{d, ac}$ | kV | 9.0 | 4.0 |
| Dielectric breakdown | cm | 4.9×10^{11} | being tested |
| Dielectric loss factor \tan | 1 | 8.0×10^{-2} | 13.0×10^{-3} |
| Volume resistivity ρ_r | 1 | 1.7 | 3.2 |
| Mechanical properties | | | |
| Overall thickness (+/-10%) | mm | 0.225 | 0.150 |
| Hardness | Shore A | 85 | 85 |
| Tensile strength | N/mm ² | 5.0 | 3.0 |
| Elongation | % | 250 | 130 |
| Physical properties | | | |
| Density | g/cm ³ | 2.32 | 2.90 |
| Application temperature | $^{\circ}\text{C}$ | -40 to +90 | -40 to +125 |

optional 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.

The following optional thicknesses are available: 0.125 mm; 0.250 mm; 0.3 mm; 0,4 mm; 0.5 mm;