

Keratherm[®] - Softtherm[®] 86/300, 86/500, 86/600

This group of Softtherm[®] films has the best thermal behavior. The films are characterized by low thermal resistance and best heat dissipation, as well as good dielectric strength. Good compressibility and low shore hardness ensure reliable and simple processability.

Applications:

- RD-RAM memory modules
- Heat pipe thermal solutions
- Automotive engine
- Control units
- Plasma supply console



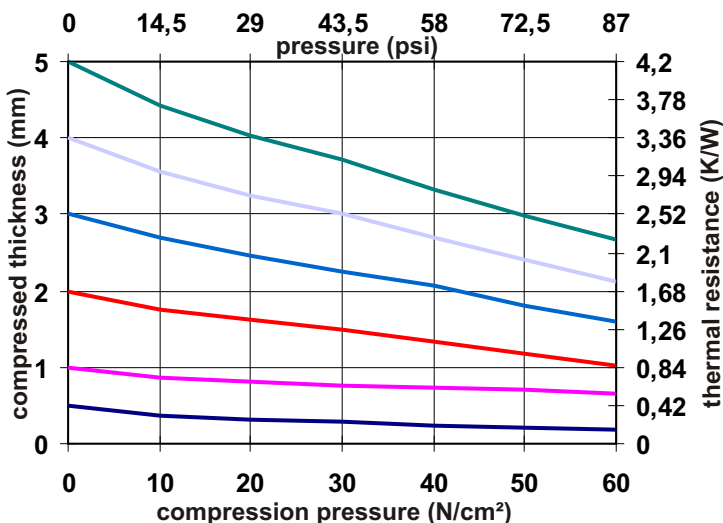
Optional available with adhesive coating!
The following film thicknesses are available:

- 86/300: 0.5 - 5.0 mm
- 86/500: 0.5 - 2.0 mm
- 86/600: 0.5 mm; 1.0 mm; 1.5 mm

| Properties | Unit | 86/300 | 86/500 | 86/600 |
|----------------------------------|-------------------|----------------------|----------------------|----------------------|
| Colour | | blue | brown | grey |
| Thermal properties | | | | |
| Thermal resistance R_{th} | K/W | 0.41 | 0.25 | 0.20 |
| Thermal impedance R_{ti} | $^{\circ}Cmm^2/W$ | 166 | 100 | 80.0 |
| | Kin^2/W | 0.25 | 0.15 | 0.12 |
| Thermal conductivity | W/mK | 3.0 | 5.0 | 6.0 |
| Electrical properties | | | | |
| Breakdown voltage $U_{d; ac}$ | kV | 8.0 | 1.0 | 1.5 |
| Volume resistivity | cm | 1.0×10^{11} | 1.0×10^{11} | 1.7×10^{10} |
| Dielectric loss factor \tan | 1 | 5.0×10^{-3} | 1.5×10^{-3} | 2.0×10^{-3} |
| Dielectric constant ϵ_r | 1 | 3.3 | 3.9 | 2.5 |
| Mechanical properties | | | | |
| Thickness (+/-10%) | mm | 0,5 | 0.5 | 0.5 |
| Hardness | Shore 00 | 65 | 75 | 60 - 70 |
| Youngs modulus * | N/cm ² | 220 | 634 | 692 |
| Physical properties | | | | |
| Application temperature | $^{\circ}C$ | -60 to +200 | -40 to +200 | -60 to +150 |
| TML | Ma.-% | < 0.35 | < 0.24 | < 0.40 |
| Flame class | UL | 94V-0 | - | being tested |

* Youngs modulus- sample size 30mmx30mmx2.5mm; variable contact pressure; compression 50% of the measured thickness

Compressibilities of Softtherm[®] 86/300



Compressibilities of Softtherm[®] 86/500

