

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

Applications:

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

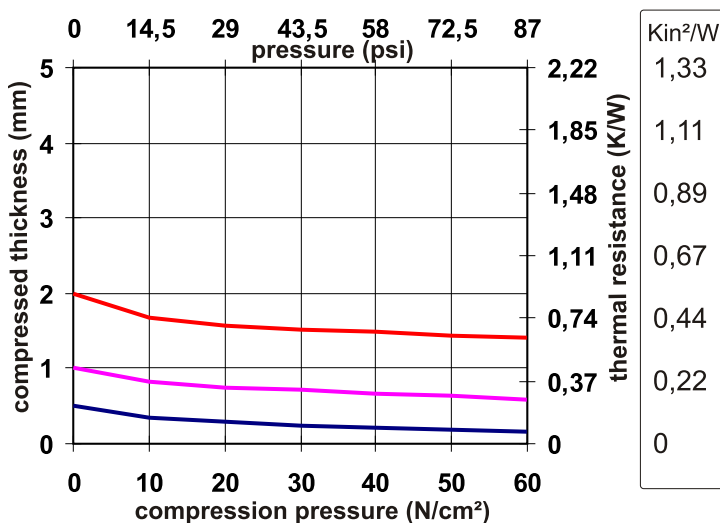
Optional available with adhesive coating!

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. Compressibility and low shore hardness ensure reliable and simple processability.

| Properties | Unit | 86/500 | 86/600 |
|--------------------------------------|--|----------------------|----------------------|
| Colour | | brown | grey |
| Thermal properties | | | |
| Thermal resistance R_{th} | K/W | 0.25 | 0.20 |
| Thermal impedance R_{ti} | $^{\circ}\text{Cmm}^2/\text{W}$ Kin^2/W | 100 0.15 | 80 0.12 |
| Thermal conductivity λ | W/mK | 5.0 | 6.0 |
| Electrical properties | | | |
| Breakdown voltage $U_{d;ac}$ | kV | 1 | 1.5 |
| Dielectric breakdown $E_{d;ac}$ | kV/mm | 2 | 3 |
| Volume resistivity | Ωm | 1.0×10^{11} | 1.7×10^{10} |
| Dielectric loss factor $\tan \delta$ | 1 | 1.5×10^{-3} | 2.0×10^{-3} |
| Dielectric constant ϵ_r | 1 | 3.9 | 2.5 |
| Mechanical properties | | | |
| Measured thickness (+/-10%) | mm | 0.5 | 0.5 |
| Hardness | Shore 00 | 70 - 80 | 60 - 70 |
| Youngs modulus * | N/cm ² | 70 | 77 |
| Physical properties | | | |
| Density | g/cm ³ | 1.33 | 1.28 |
| Application temperature | $^{\circ}\text{C}$ | -60 to +200 | -60 to +180 |
| TML | Ma.-% | < 0.24 | < 0.40 |
| Flame class | UL | - | - |
| Possible thickness** | mm | 0.5 - 2.0 | 0.5 - 1.5 |

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

Compressibilities of Softtherm[®] 86/500



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