

## Keratherm® - Softtherm® 86/202, 86/212, 86/225

These films offer a cost-effective alternative to the standard films in the Softtherm® - 200 series. The films are characterized by their thermal and electrical properties and good plasticity.

Properties	Unit	86/202	86/212	86/225
Colour		grey	grey	orange
<b>Thermal properties</b>				
Thermal resistance $R_{th}$	K/W	0.90	0.90	0.60
Thermal impedance $R_{ti}$	°Cmm²/W	357	357	218
	Kin²/W	0.55	0.55	0.32
Thermal conductivity $\lambda$	W/mK	1.4	1.4	2.0
<b>Electrical properties</b>				
Breakdown voltage $U_{d, ac}$	kV	2.5	2.0	6.0
Dielectric breakdown $E_{d, ac}$	kV/mm	5.0	4.0	12.0
Volume resistivity	$\Omega m$	$2.7 \times 10^{12}$	$1.2 \times 10^{15}$	$2.2 \times 10^{11}$
Dielectric loss factor $\tan \delta$	1	$6.0 \times 10^{-3}$	$4.5 \times 10^{-4}$	$1.0 \times 10^{-3}$
Dielectric constant $\epsilon_r$	1	4.2	2.68	3.6
<b>Mechanical properties</b>				
Measured thickness (+/-10%)	mm	0.5	0.5	0.5
Hardness	Shore 00	20 - 30	25 - 35	30 - 45
Youngs modulus*	N/cm²	47	39	58
<b>Physical properties</b>				
Density	g/cm³	1.46	1.46	1.65
Application temperature	°C	-60 to +200	-60 to +200	-40 to +180
TML	Ma.-%	< 0.50	< 0.25	< 0.44
Flame rating	UL	94V-0	-	94V-0***
Possible thickness**	mm	0.5 - 5.0	0.5 - 5.0	0.5 - 5.0

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

\*\*\*Kerafol test according to UL

### Applications:

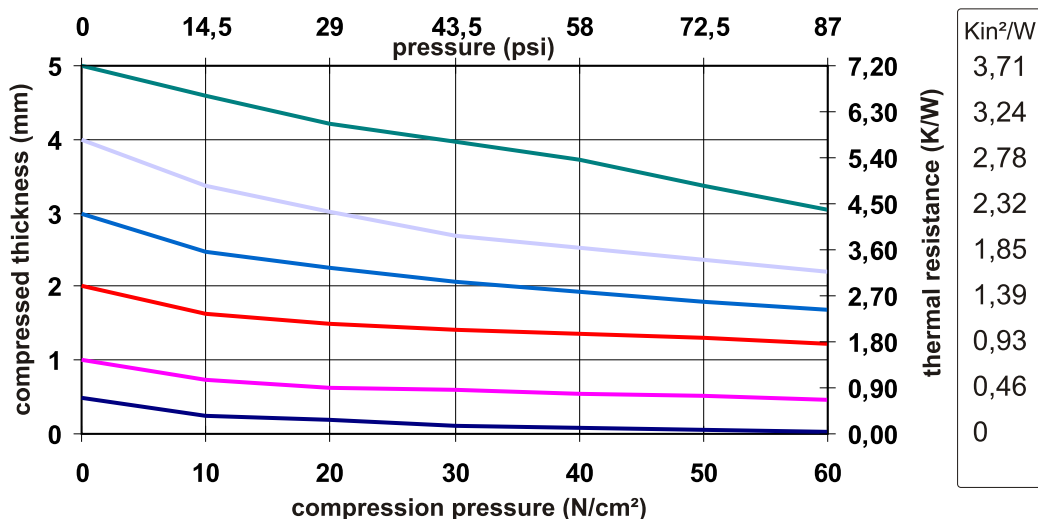
- RD-RAM memory modules
- Heat pipe thermal solutions
- Automotive engines
- Control units
- Plasma supply console

**Optional available with adhesive coating!**

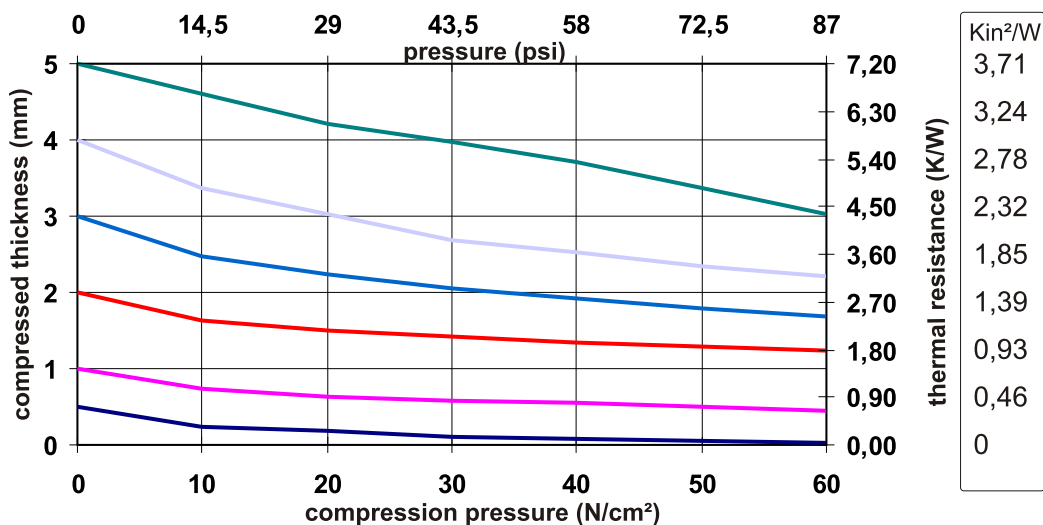


The data presented in this leaflet are in accordance with the present state of our knowledge. All statements, technical information and recommendations herein are based on tests we believe to be reliable. The customer is thereby not absolved from carefully checking all supplies immediately on receipt. The recommendations made in this catalogue should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. Before using, user shall determine the suitability of the product for its intended use, and the user assumes all risks and liability whatsoever in connection therewith. We reserve the right to alter product constants within the scope of technical process or new developments. The recommendations do not absolve the customer from the obligation of investigating the possibility of infringement of third parties right and, if necessary, clarifying the position. Sellers' and manufacturer' only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable either in tort or contract for any loss or damage, direct or incidental, or consequential, including loss of profits or revenue arising out of the use or the inability to use a product. No statement, purchase order or recommendations by seller or purchaser not contained herein shall have any force or effect unless in an agreement signed by the officers of the seller and manufacturer. Last update: 06/2011

### Compressibilities of Softtherm® 86/202



### Compressibilities of Softtherm® 86/212



### Compressibilities of Softtherm® 86/225

