

Datasheet

# Keratherm<sup>®</sup> - Softtherm<sup>®</sup>

## 86/300, 86/500

**Applications:**

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



Properties	Unit	86/300	86/500
Color		blue	brown
<b>Thermal Properties</b>			
Thermal resistance $R_{th}$	K/W	0.41	0.25
Thermal impedance $R_{ti}$	$^{\circ}Cmm^2/W$	166	100
	$Kin^2/W$	0.25	0.15
Thermal conductivity	W/mK	3.0	5.0
<b>Electrical Properties</b>			
Breakdown voltage $U_{d, ac}$	kV	8.0	1.0
Volume resistivity	cm	$1.0 \times 10^{11}$	$1.0 \times 10^{11}$
Dielectric loss factor $\tan \delta$	1	$5.0 \times 10^{-3}$	$1.5 \times 10^{-3}$
Dielectric constant $\epsilon_r$	1	3.3	3.9
<b>Mechanical Properties</b>			
Thickness (+/-10%)	mm	0.5*	0.5*
Hardness	Shore 00	65	75
Youngs modulus <sup>2)</sup>	N/cm <sup>2</sup>	220	634
<b>Physical Properties</b>			
Application temperature	$^{\circ}C$	-60 to +200	-40 to +200
TML	Ma.-%	< 0.35	< 0.24
Flame class	UL	94V-0	-

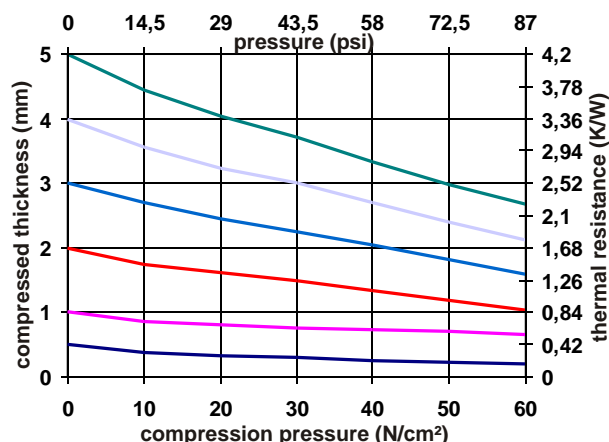
The following thicknesses are available: **86/300: 0,5 - 5,0 mm**  
**86/500: 0,5 - 2,0 mm**

optional available with adhesive!

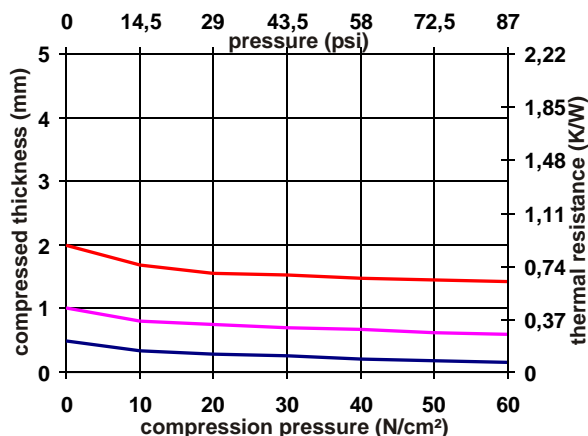
Youngs modulus- sample size 30mmx30mmx2.5mm; variable contact pressure; compression 50% of the measured thickness

This group of Softtherm<sup>®</sup> films has the best thermal behavior. The group is characterized by its low thermal resistance and best heat dissipation, as well as good dielectric strength. The good compressibility and low shore hardness ensure reliable and simple processability.

**Compressibilities of Softtherm<sup>®</sup> 86/300**



**Compressibilities of Softtherm<sup>®</sup> 86/500**



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 updated: March 2006