DATASHEET

KERAFOL®

Softtherm®: 86/300 & 86/500

Highest Thermal Conductivity

This group of Softtherm® 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.

APPLICATIONS

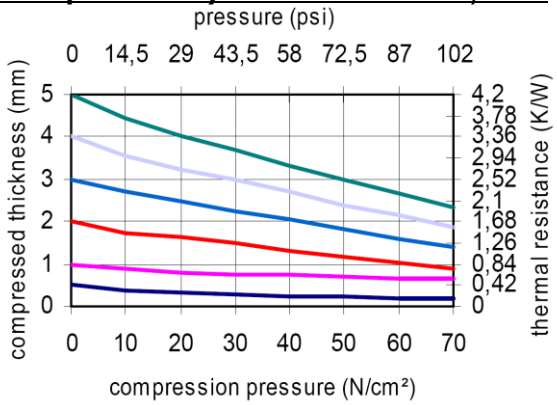
- RD-RAM Memory Module
- Heat Pipe Thermal Solutions
- Automotive Engine
- Control Units
- Plasma Supply Console

Properties	symbol	unit	86/300	86/500
Color			blue	brown
Thermal Properties				
Thermal Resistance	R_{th}	K/W	0.41	0.25
Thermal Impedance	R_{ti}	°Cmm²/W Kin²/W	166 0.25	100 0.15
Thermal Conductivity	λ	W/mK	3.0	5.0
Electrical Properties				
Breakdown Voltage	$U_{d;ac}$	kV	8.0	1.0
Volume Resistivity		Ωcm	1.0×10^{11}	1.0×10^{11}
Dielectric Loss Factor	tan δ	1	5.0×10^{-3}	1.5×10^{-3}
Dielectric Constant	ε_r	1	3.3	3.9
Mechanical Properties				
Thickness (±10%)		mm	0.5*	0.5*
Hardness		Shore A	65	75
Youngs Modulus **		N/cm²	220	634
Physical Properties				
Application Temperature		°C	-60 to +200	-40 to +200
Total Mass Loss (TML)		Ma.-%	< 0.35	< 0.24
Flame class		UL	94V-0	-

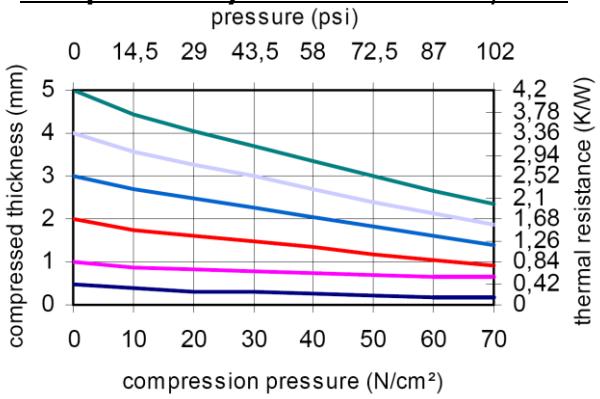
Available Thicknesses
86/300: 0.5 – 5.0 mm
86/500: 0.5 – 2.0 mm

** **Youngs Modulus**: sample size 30mmx30mmx2.5mm; variable contact pressure; compression 50% of the measured thickness
Available with Optional Adhesive!

Compressibility of Softtherm® 86/300:



Compressibility of Softtherm® 86/500:



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