

Softtherm®: 86/450 & 86/500



This group of Softtherm films are characterized by their extremely high thermal conductivity. These single layer films without fiberglass reinforcement have good compressibility and softness. The good dimensional stability of these films ensures controlled and automated processing.

APPLICATIONS

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

DISCLAIMER: Purchaser shall be solely responsible for determining the adequacy of the product for any and all uses which the purchaser shall apply the product, and the application of the product by the purchaser shall not be subject to any implied warranty of fitness for that purpose.

Available Thicknesses

86/450: 0.5 – 4.0 mm
86/500: 0.5 – 2.0 mm

Properties	symbol	unit	86/450	86/500
Color			chocolate	brown
Thermal Properties				
Thermal Resistance	R_{th}	K/W	0.27	0.25
Thermal Impedance	R_{ti}	$^{\circ}\text{Cmm}^2/\text{W}$	108	100
		Kin^2/W	0.18	0.15
Thermal Conductivity	λ	W/mK	4.5	5.0
Electrical Properties				
Breakdown Voltage	$U_{d;ac}$	kV	5.0	1.0
Dielectric Breakdown	$E_{d;ac}$	kV/mm	10	2
Volume Resistivity		Ωm	3.6×10^{12}	1.0×10^{11}
Dielectric Loss Factor	$\tan \delta$	1	3.0×10^{-3}	1.5×10^{-2}
Dielectric Constant	ϵ_r	1	2.5	3.9
Mechanical Properties				
Measured Thickness ($\pm 10\%$)		mm	0.5*	0.5*
Hardness		Shore A	65 - 75	65 - 75
Youngs Modulus **		N/cm ²	94.5	70
Physical Properties				
Density		g/cm ³	1.32	1.33
Application Temperature		$^{\circ}\text{C}$	-40 to +180	-60 to +200
Total Mass Loss (TML)		Ma.-%	< 0.40	< 0.24
Flame class		UL	94V-0	94V-0

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

Available with Optional Adhesive!

