

## Softtherm<sup>®</sup>: U 200 Silicone Free



A new silicone-free Softtherm<sup>®</sup> film based on a copolymer. Besides good thermal behavior the film has good compressibility and aging resistance. This carrier-free film displays good relaxation behavior and can be produced in thicknesses from 0.5mm to 5.0mm.

The film is good for applications in sensitive areas where materials containing silicone cannot be used.

### APPLICATIONS

- Automotive
- LED Applications

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.

Properties	symbol	unit	U 200
Color			brown
<b>Thermal Properties</b>			
Thermal Resistance	$R_{th}$	K/W	< 0.60
Thermal Impedance	$R_{ti}$	$^{\circ}\text{Cmm}^2/\text{W}$ $\text{Kin}^2/\text{W}$	218 0.38
Thermal Conductivity	$\lambda$	W/mK	> 2.0
<b>Electrical Properties</b>			
Breakdown Voltage	$U_{d;ac}$	kV	7.0
Dielectric Breakdown	$E_{d;ac}$	kV/mm	14
Volume Resistivity		$\Omega\text{m}$	$5.1 \times 10^9$
Dielectric Loss Factor	$\tan \delta$	1	$3.6 \times 10^{-2}$
Dielectric Constant	$\epsilon_r$	1	8.1
<b>Mechanical Properties</b>			
Measured Thickness ( $\pm 10\%$ )		mm	0.5*
Hardness		Shore 00	55 – 70
Youngs Modulus**		N/cm <sup>3</sup>	197
<b>Physical Properties</b>			
Density		g/cm <sup>3</sup>	2.10
Application Temperature		$^{\circ}\text{C}$	-40 to +130
TML		Ma.-%	< 0.80
Flame class		UL	94V-0
Available Thicknesses		mm	0.5 – 4.0

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

