

Softtherm[®]: Silicone Free U 281



Flexible ceramic thermal-conducting and insulating film Softtherm U 281 is particularly suited for silicone-sensitive applications and as an alternative to silicone-based Softtherm films.

The silicone-free Softtherm film has a high electrical insulation and very good thermal conductivity.

Optional available with adhesive coating!

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.

Properties	symbol	unit	U 281
Color			gray
Thermal Properties			
Thermal Resistance	R_{th}	K/W	0.60
Thermal Impedance	R_{ti}	$^{\circ}\text{Cmm}^2/\text{W}$ Kin^2/W	240 0.37
Thermal Conductivity	λ	W/mK	2.0
Electrical Properties			
Breakdown Voltage	$U_{d;ac}$	kV	7.0
Dielectric Breakdown	$E_{d;ac}$	kV/mm	14
Volume Resistivity		Ωm	5.32×10^9
Dielectric Loss Factor	$\tan\delta$	1	7.8×10^{-2}
Dielectric Constant	ϵ_r	1	5.57
Mechanical Properties			
Measured Thickness ($\pm 10\%$)		mm	0.5*
Hardness		Shore 00	55 – 65
Youngs Modulus**		N/cm ³	244
Physical Properties			
Density		g/cm ³	2.6
Application Temperature		$^{\circ}\text{C}$	-40 to +130
TML		Ma.-%	< 0.9
Flame class		UL	94V-0
Available Thicknesses		mm	0.5 – 3.0

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

