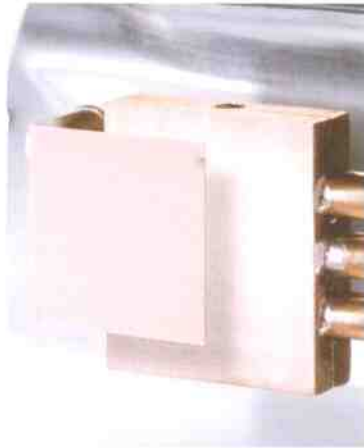


Keratherm® - red Standard films

Applications:

- "High End" solutions
- Control boards
- BGA applications
- Hard-disc-drives



Properties	Unit	86/81	86/82 with fibre glass	86/83 with fibre glass
Colour		red	red	red
Thermal properties				
Thermal resistance R_{th}	K/W	0.10	0.09	0.07
Thermal impedance R_{ti}	$^{\circ}\text{Cmm}^2/\text{W}$ Kin^2/W	39 0.07	35 0.05	31.2 0.04
Thermal conductivity λ	W/mK	5.5	6.5	8.0
Electrical properties				
Breakdown voltage $U_{d,ac}$	kV	1.0	1.0	1.0
Dielectric breakdown $E_{d,ac}$	KV/mm	4.0	4.0	4.0
Volume resistivity	Ωcm	2.0×10^{14}	2.0×10^{14}	5.9×10^{15}
Dielectric loss factor $\tan \delta$	1	1.9×10^{-3}	1.4×10^{-3}	30×10^{-3}
Dielectric constant ϵ_r	1	2.3	2.4	1.83
Mechanical properties				
Overall thickness (+/-10%)	mm	0.200	0.250	0.250
Hardness	Shore A	30	65	55
Tensile strength	N/mm ²	0.6	20	10
Elongation	%	20	2	2
Physical properties				
Application temperature	$^{\circ}\text{C}$	-40 to +200		
Density	g/cm ³	2.9	2.35	2.30
Flameclass	UL	-	94V-0	-

This film is especially suitable for high-power applications. It has excellent thermal and electrical properties. Thanks to its good performance, the Keratherm red can be used reliably in densely packed electronic applications.

Options for Keratherm® -red

Type	Film structure	Overall thickness mm	TML Ma.-%	Tensile strength N/mm ²	Thermal resistance	
					K/W	Kin ² /W
86/82lb	86/82 with fibre glass as low bleeding	0.250	< 0.29	10	0.14	0.09

The following thicknesses are available: 0,250 mm; 0,3 mm; 0,4 mm; 0,5 mm