

Datasheet

Keratherm[®] - red standard films

NEW

Applications:

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



Properties	Unit	86/81	86/82 with fibre glass	86/83 with fibre glass
Color		red	red	red
Thermal properties				
Thermal resistance R _{th}	K/W	0.10	0.09	0.09
Thermal impedance R _{ti}	°Cmm ² /W	39	35	30.9
	Kin ² /W	0.07	0.05	0.05
Thermal conductivity	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	cm	2.0 x 10 ¹⁴	2.0 x 10 ¹⁴	being tested
Dielectric loss factor tan	1	1.9 x 10 ⁻³	1.4 x 10 ⁻³	being tested
Dielectric constant ε _r	1	2.3	2.4	being tested
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	°C	-40 to +200		
Density	g/cm ³	2.9	2.35	-
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 (standard film)

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 and adhesive coating	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;