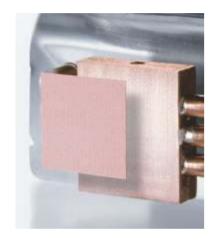
Keratherm[®] - red Standard Films

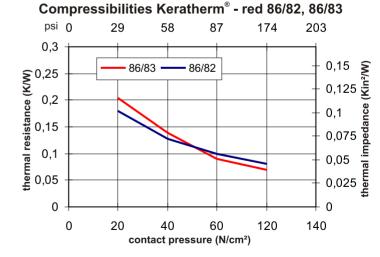
Applications:

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



Properties	Unit	86/81	86/82 with fibre glass	86/83 with fibre glass					
Colour		red/brown red		red					
Thermal properties									
Thermal resistance R _{th}	K/W	0.10	0.09	0.07					
Thermal impedance R _{ti}	°Cmm²/W	39	35	31,2					
	Kin ² /W	0.07	0.05	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	Ω m	2.0 x 10 ¹⁴	2.0 x 10 ¹⁴	5.9 x10 ¹⁵					
Dielectric loss factor tan δ	1	1.9 x 10 ⁻³	1.4 x 10 ⁻³	3.0 x 10 ⁻²					
Dielectric contant ε _r	1	2.3	2.4	1.83					
Mechanical properties									
Measured thickness (+/-10%)	mm	0.200	0.250	0.250					
Hardness	Shore A	25 - 35	60 - 70	50 - 60					
Tensile strength	N/mm²	0.6	20	10					
Elongation	%	20	2	2					
Physical properties									
Application temperature	°C	-40 to +200							
Density	g/cm ³	1.36	1.23	1.10					
Flame rating	UL	-	94-V0	-					
Possible thickness*	mm	0,200	0.25 - 0.5	0.25 – 0.5					

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	TML	Tensile strength Thermal resista		esistance
Туре		mm	Ma%	N/mm²	K/W	Kin²/W
86/82lb	86/82 with fibre glass as low bleeding	0.250	< 0.29	10	0.14	0.09

The data presented in this leaflet are in accordance with the present state of our knowledge. All statements, technical information and recommendations herein are based on tests we believe to be reliable. The customer is thereby not absolved from carefully checking all supplies immediately on receipt. The recommendations made in this catalogue should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. Before using, user shall determine the suitability of the product for its intended use, and the user assumes all risks and liability whatsoever in connection there with. We reserve the right to alter product constants within the scope of technical process or new developments. The recommendations do not absolve the customer from the obligation of investigating the possibility of infringement of third parties right and, if necessary, clarifying the position. Sellers' and manufacturer' only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable either in tort or contract for any loss or damage, direct or incidental, or consequential, including loss of profits or revenue arising out of the use or the inability to use a product. No statement, purchase order or recommendations by seller or purchaser not contained herein shall have any force or effect unless in an agreement signed by the officers of the seller and manufacturer. last update: 06/2011