

Keratherm[®] - Graphite 90/10, 90/15, 90/20

Applications:

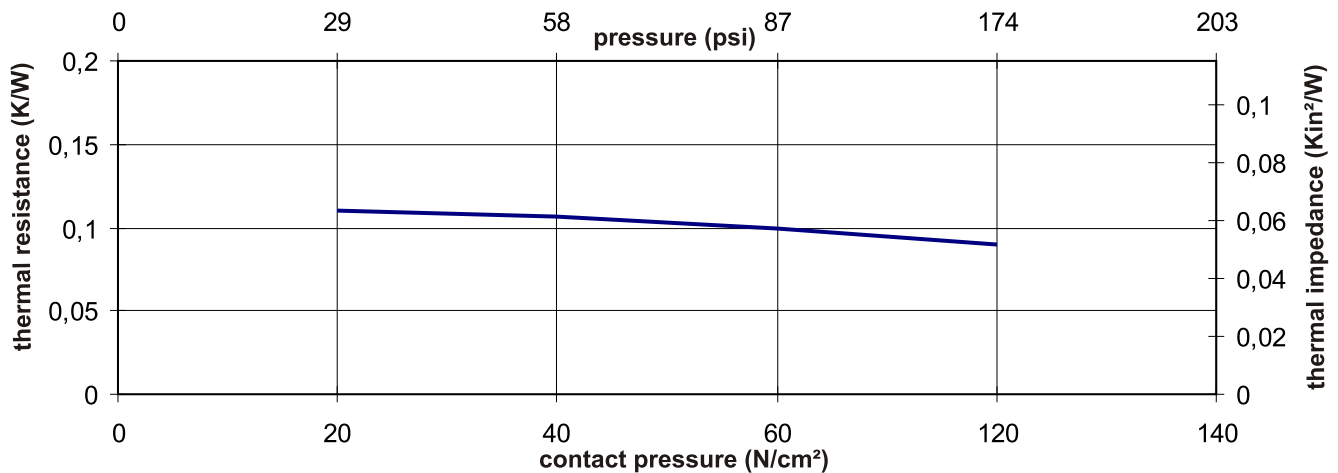
- Chipsets
- Memory chips
- Micro BGA



Keratherm[®] graphite films are based on 100% pure graphite. The films are available as uncoated types and for specific applications, with filled adhesive or standard adhesives. Because of their high thermal conductivity they are used e.g. in the CPU sector.

Properties	Unit	90/10 basic film
Colour		black
Thermal Properties		
Thermal resistance R_{th}	K/W	0.09
Thermal impedance R_{ti}	$^{\circ}\text{Cmm}^2/\text{W}$ Kin^2/W	36 0.05
Thermal conductivity λ (x-y)	W/mK	5.5 (200)
Electrical Properties		
Electrical resistance z (x/y)	$\Omega\mu\text{m}$	6 – 8 (650-700)
Breakdown voltage $U_{d; ac}$	kV	conductive
Volume resistivity	Ωm	0.07
Mechanical Properties		
Measured thickness (+/-10%)	mm	0.200
Hardness	Shore D	25 - 35
Tensile strength	N/mm ²	5.5
Elongation	%	10
Physical Properties		
Application temperature	$^{\circ}\text{C}$	-40 to +500
Density	g/cm ³	> 1.0
Flame rating	UL	94V-0
TML	Ma.%	0.01
Possible thickness*	mm	0.150 – 0.200

Compressibility of Keratherm[®] - Graphite Film 90/10



Options for Keratherm[®] - Graphite

Type	Tape assembling	Thickness mm	Tensile strength N/mm ²	Thermal resistance	
				K/W	Kin ² /W
90/15	90/10 with filled adhesives	0.200	6.0	0.07	0.04
90/20	90/10 with standard-adhesives	0.250	5.5	0.23	0.10