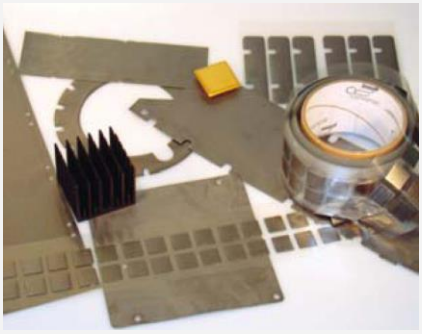
DATASHEET

KERAFOL®

Keratherm Graphite
90/10, 90/15, 90/20



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

APPLICATIONS

- Chipsets
- Memory Chips
- Micro BGA's

Properties *symbol*	**unit**	**90/10** basis foil
Color		black
Thermal Properties		
Thermal Resistance R_{th}	K/W	0.09
Thermal Impedance R_{ti}	°Cmm²/W Kin²/W	36 0.05
Thermal Conductivity λ z (x-y)	W/mK	5.5 (200)
Electrical Properties		
Breakdown Voltage $U_{d;ac}$	kV	conductive
Electrical Resistance z (x/y)	Ωμm	650 – 700 (6 - 8)
Mechanical Properties		
Overall Thickness (±10%)	mm	0.200
Hardness	Shore D	25 - 35
Tensile Strength	N/mm²	5.5
Elongation	%	10
Physical Properties		
Application Temperature	°C	-40 to +500
Density	g/cm³	> 1.0
Flame Class	UL	94V-0
TML	Ma.%	0.01
Possible Thickness	mm	0.150 – 0.200

Options for Keratherm 90-Series:

Type	**Film Structure**	**Overall Thickness**	**Tensile Strength**	**Thermal Resistance**	
		mm	N/mm²	K/W	Kin²/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

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