

KL 90 & KL 91

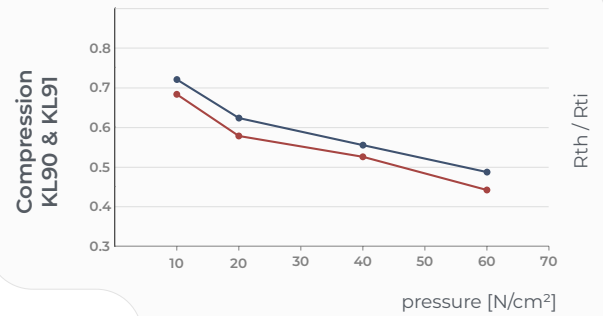
KERATHERM® thermally conductive adhesive film

Benefits

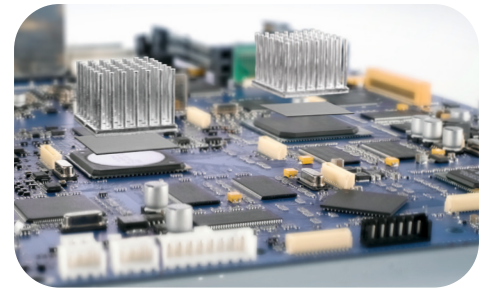
- High thermal conductivity
- High adhesive strength
- Good adhesion to various surfaces
- Reinforcement with fibreglass possible

Properties	Unit	KL 90	KL 91
Colour		black	black
Basic material		acrylate	acrylate
Reinforcement (fibreglass)		without	with
Thermal Properties*			
Thermal resistance R_{th}	K/W	0.52	0.55
Thermal impedance R_{ti}	$^{\circ}\text{Cmm}^2/\text{W}$	208	220
	Kin^2/W	0.32	0.34
Thermal conductivity λ	W/mK	1.40	1.35
Electrical Properties*			
Dielectric breakdown voltage $U_{d,AC}$	kV	6.0	6.0
Volume resistivity	Ωm	2.6×10^4	2.6×10^4
Dielectric loss factor $\tan \delta$		3.1×10^{-1}	3.1×10^{-1}
Dielectric constant ϵ_r		18.5	18.5
Mechanical Properties			
Hardness	Shore A	45	59
Tensile strength	N/mm ²	0.3	11.3
Physical Properties			
Application temperature	$^{\circ}\text{C}$	-40 to +125	-40 to +125
Density	g/cm ³	1.98	1.87
Total mass loss (TML)	Ma.-%	< 0.15	< 0.15
Flame rating	UL-94	V-0	V-0
Possible thickness	mm	0.3-0.5	0.3

* Measured @ thickness 0.3mm



Rth [K/W] — Rti [Kin²/W]



Ceramic filled double-sided adhesive film - with or without fibreglass! KL 90 and KL 91 are double sided adhesive films. They have an excellent, adhesive strength with high thermal conductivities and very good insulation characteristics at the same time.

Low thermal contact resistances can be achieved with adhesive strength on different surfaces.

No mechanical fixation with clips or screws needed.

Due to the soft surface finish, tolerances can be compensated very well. Light weight, easy handling and high elasticity are further advantages.