KL 90 & KL 91

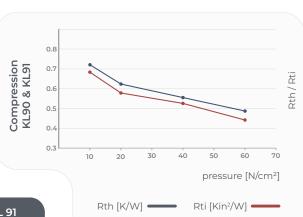
KERATHERM® thermally conductive adhesive film

Benefits

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

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Properties	Unit	KL 90	KL 91
Colour		black	black
Basic material		acrylate	acrylate
Reinforcement (fibreglass)		without	with
Thermal Properties*			
Thermal resistance $R_{\rm th}$	K/W	0.52	0.55
Thermal conductivity $\boldsymbol{\lambda}$	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 $\boldsymbol{\delta}$		3.1 × 10 ⁻¹	3.1 x 10 ⁻¹
Dielectric constant ϵ_{r}		18.5	18.5
Mechanical Properties			
Hardness	Shore A	45	59
Tensile strength	N/mm²	0.3	11.3
Physical Properties			
Application temperature	°C	-40 to +125	-40 to +125
Density	g/cm³	1.98	1.87
Total mass loss (TML)	Ma%	< 0.15	< 0.15
Flame rating	UL-94	V-O	V-0
Possible thickness	mm	0.3 - 0.5	0.3

^{*} Measured @ thickness 0.3 mm





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.



Note

Disclaimer of Warranties and Limitation of Liability

The specifications provided in this data sheet do not constitute a guarantee or warranty of specific product properties ("quality guarantee"). These specifications are derived from our standardized testing procedures conducted under controlled laboratory conditions and are intended to describe the typical properties of the products as expected under standard applications. Variations may occur depending on the specific application. Accordingly, it is the responsibility of the customer to test and evaluate the products for their intended use, and adjustments to the application may be required.

The customer assumes full responsibility for the safety and functionality of their applications in which these products are integrated. Appropriate safety measures must be implemented to prevent bodily injury, fire, or other damages resulting from product defects. The customer is also responsible for ensuring that the design of their application complies with all applicable laws, regulations, codes, and standards.

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12-2024