



# KL 95

## KERATHERM® ceramic filled adhesive film

### Applications

Thermal connection of

- ◆ MOSFETS
- ◆ CPUs, LEDs
- ◆ Flip Chips, DSPs
- ◆ BGAs, PPGAs  
on heat sinks

### Representatives

- ◆ Power supplies and inverter modules
- ◆ Computers
- ◆ Telecommunication electronics
- ◆ Automotive electronic

Properties	Unit	KL 95
Colour		grey
		Filled Acrylic Polymer
<b>Thermal Properties*</b>		
Thermal conductivity $\lambda^{**}$	W/mK	1.3
Thermal resistance $R_{th}$	K/W	0.32
<b>Electrical Properties*</b>		
Dielectric breakdown voltage $U_{d, ac}$	kV/mm	2
Volume resistivity	$\Omega m$	$2.0 \times 10^{11}$
Dielectric loss factor $\tan \delta$	(1KHz)	$2.4 \times 10^{-1}$
Dielectric constant $\epsilon_r$	(1KHz)	1.7
<b>Mechanical Properties</b>		
Hardness	Shore A	60
Tensile shear strength <sup>†</sup>	N/cm <sup>2</sup>	> 6.5
Tensile shear strength <sup>†</sup> (Temperature aging)	1h/65°C	26.90
	24h/65°C	34.30
	72h/65°C	48.80
<b>Physical Properties</b>		
Adhesion*** (bonding strength)	Nmm	> 0.5
Tack**** (surface Adhesiveness)	mm	> 1.0
Density	g/cm <sup>3</sup>	2.24
Application temperature****	°C	-40 to +100
Possible thickness	mm	0.18 - 0.3

\* Measured @ thickness 0.18 mm

\*\* Tensile shear strength Alu/Foil/Alu – 25x25 mm<sup>2</sup>(outsourcing – 48h/RT);

\*\*\* used measurement – Texture Analyser (TA.XT-plus)

\*\*\*\* KERAFOL® test according to UL

The KERATHERM® - KL 95 is a highly filled multifunctional adhesive tape. Characteristic are the good thermal conductivity, good dielectric properties and excellent adhesive behavior. The adhesive tape is very suitable for bonding a wide variety of electronic components and heat sinks.

Data for engineer guidance only.  
Observed performance varies in application.  
Engineers are reminded to test the material in application.

**NOTE:**

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. KERAFOL® is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product. All specifications are subject to change without notice. Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded. In case KERAFOL® would be nevertheless held liable, on whatever legal ground, KERAFOL®'s liability will in no event exceed the amount of the concerned delivery. All KERAFOL® products are sold pursuant to the KERAFOL®'s Terms and Conditions of sale and delivery in effect from time to time, a copy of which will be furnished upon request.

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