

## Keratherm® - Thermal Grease

### KP 92, KP 97, KP 12 (silicone free)

#### Applications:

- Notebooks
- Desktop CPU's
- IGBT Units



Properites	Unit	KP 92	KP 97	KP 12 silicone free
Colour		silver	white	silver
Compound		soft / pasty		
Thermal properties				
Thermal resistance R <sub>th</sub>	K/W	0.007	0.012	0.006
Thermal conductivity	W/mK	10.0	5.0	10.0
Electrical properties				
Dielectric breakdown E <sub>d; ac</sub>	KV/mm	-	2.0	-
Mechanical properties				
Coating thickness (+/-10%)	mm	0.03-0.06	0.03-0.06	0.03-0.06
Viscosity	Pas	65	90 - 120	76
Density	g/cm <sup>3</sup>	2.6	2.10	1.4
Application temperature	°C	-60 to +200	-60 to +150	
Long term stability (1000h / 85°C / 85% relative humidity)				
Thermal resistance R <sub>th</sub>	K/W	0.008	0.012	0,006
TML	Ma.-%	0.09	0.5	0.1

Technical data for KP 93, KP 77, KP 68 on request!

KP92 and KP97 are ceramic-filled single-component silicones with a high thermal conductivity. The non-crosslinked thermal compounds do not dry out. The silicone components do not leak out of the compound. The silicone-free thermal compound KP12 consists of synthetic, thermal polymer and is suitable for a fast and effective heat dissipation. The paste is particularly suitable for silicone sensitive applications. Its long-term stability guarantees a full operability during the entire life time of the product. Under normal application conditions the KP12 silicone-free does not cure, dry out or melt. Special storage of Keratherm "Thermal Grease" is not required, therefore they can be stored under normal climate conditions for up to 12 months. If any separation of the filler materials becomes evident, the KP's must be mixed thoroughly before use.

#### Comparison of the thermal resistance of different pastes in dependence on the contact pressure

