

Keratherm Thermal Grease



Ceramic-filled single component silicone 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 KP 12 consists of synthetic, thermal polymer and is suitable for a fast and effective heat dissipation. The paste is particularly suitable for silicone sensitive applications.

APPLICATIONS

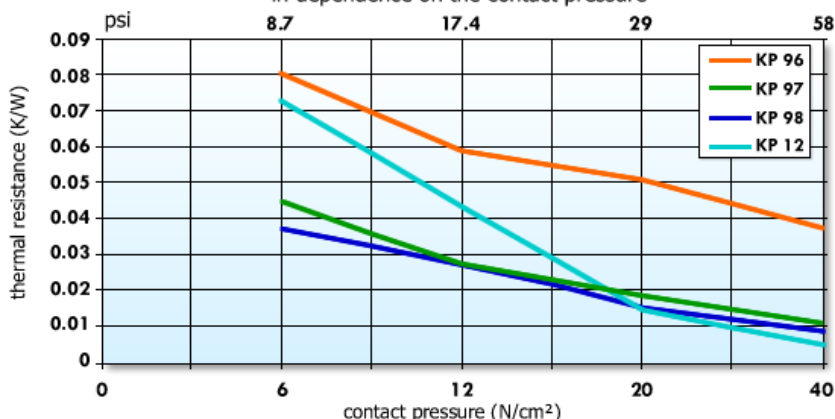
- Notebooks
- Desktop CPU's
- Heat Pipes

DISCLAIMER: Purchaser shall be solely responsible for determining the adequacy of the product for any and all uses which the purchaser shall apply the product, and the application of the product by the purchaser shall not be subject to any implied warranty of fitness for that purpose.

Properties	symbol	unit	KP 96	KP 97	KP 98	KP 12 silicone free
Color			dark white	white	gray	silver
Consistency			soft/paste			
Thermal Properties						
Thermal Resistance	R_{th}	K/W	0.038	0.012	0.01	0.006
Thermal Impedance	R_{ti}	$^{\circ}\text{Cmm}^2/\text{W}$ Kin^2/W	11 0.017	4.5 0.007	4.1 0.0064	2.2 0.0033
Thermal Conductivity	λ	W/mK	2.4	5.0	6.0	10.0
Electrical Properties						
Electrical Conductivity		pS/m	8	0	0	53
Mechanical Properties						
Coating Thickness		mm	0.030	0.030	0.030	0.030
Viscosity		Pas	25 - 35	80 - 120	90-130	60 - 90
Density		g/cm^3	2.6	2.1	2.2	1.4
Application Temperature		$^{\circ}\text{C}$	-60 to +150			
Long Term Stability (1000h / 85°C / 85% relative humidity)						
Thermal Resistance	R_{th}	K/W	0.038	0.012	0.008	0.006
Total Mass Loss (TML)		Ma.-%	≤ 1.4	≤ 1.3	≤ 1.5	< 0.1

KP 96, KP 97, KP 98 and KP 12

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



The KP's long-term stability guarantees a full operability during the entire life time of the product. Under normal application conditions Keratherm Thermal Grease 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.