

THERMAL CONDUCTIVITY
(W/m·°K)

1,9

Electrically insulating



High-performance thermally conductive thermo-silicone KU-CG

HEATPAD® KU-CG is a fiberglass reinforced silicone foil filled with thermally conductive ceramics, hence its high thermal conductivity. By implementing it, a very low total thermal resistance can be achieved. Its performance range and flexibility make it the ideal interface material for most applications.

PROPERTIES

- High thermal conductivity
- Very low total thermal transfer resistance
- Fiberglass reinforced for mechanical stability
- Very flexible
- Quick and clean handling, superior process reliability
- No thermal paste required
- UL flammability rating: UL 94 V0 (FileNo: E337894)



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We disclaim all liability for accuracy of this information. Technical detail is subject to change.

Image may differ from the original product

¹ Voltage ramp 1000 V/s

² Step-by-step voltage increments until dielectric breakdown

³ Increase of thermal resistance through adhesive by about 0,1 °C/W

PART	KU-	CG20	CG30	CG45	CG80						
this thickness is directly proportional to the thickness of the material						GENERAL PROPERTIES					
						Material		Fiberglass reinforced silicone			
						Filler		Thermally conductive ceramic (Boron Nitride)			
						Colour		Salmon			
						Gauge	mm	0,2 ^{-0,05 to +0,05}	0,3 ^{-0 to +0,1}	0,45 ^{-0,05 to +0,05}	0,8 ^{-0 to +0,1}
						Density	g/cm³	2,5	2,5	2,5	2,5
						Outgassing (LMW Siloxane)	ppm	Σ D3 - D10 = <10			
MECHANICAL PROPERTIES											
Tensile strength	Mpa	25,9	24,1	20,4	9,3						
Tear strength	kN/m	70	69	68	24						
Hardness (Shore A)		92	92	92	92						
ELECTRICAL PROPERTIES											
Breakdown Voltage (Voltage ramp) ¹	V (AC)	5000	7000	10000	19999						
Breakdown Voltage (Voltage steps) ²	V (AC)	2000	3000	5000	10000						
Dielectric Constant (1 kHz)		3,8	4,2	4,3	4,3						
Volume Resistivity	Ωm	1,8 x 10 ¹²	1,8 x 10 ¹²	1,2 x 10 ¹²	1,0 x 10 ¹²						
THERMAL PROPERTIES											
Thermal conductivity	W/mK	1,9	1,9	1,9	1,9						
Thermal resistance ³ (inch²)	°C/W	0,30	0,45	0,65	1,05						
Operating temperature	°C	-60 to +200	-60 to +200	-60 to +200	-60 to +200						

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