

THERMAL CONDUCTIVITY
(W/m·°K)

1.9

electrically insulating

Thermo-silicone interface material KU-CG

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

PROPERTIES

- High thermal conductivity
- Very low thermal resistance
- Very flexible
- Fiberglass reinforced
- Clean and easy mounting, high process reliability
- No thermal paste required
- UL flammability rating: UL 94 V0

We disclaim all liability for the correctness of the information contained herein.

We reserve the right to make technical changes without notice.

For explanatory notes regarding voltage ramp/step, see page 136

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

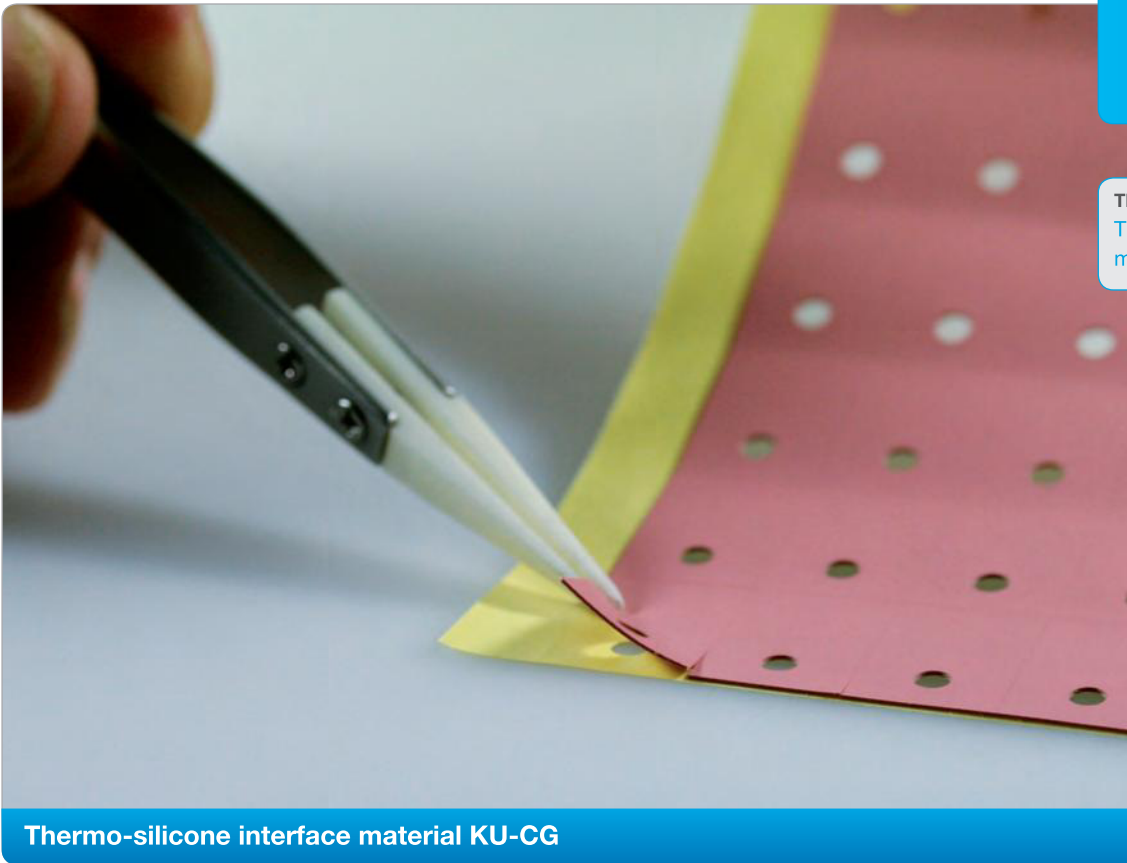
PART	KU-	CG 20	CG 30	CG 45	CG 80
GENERAL PROPERTIES					
Material	Fiberglass reinforced silicone				
Filler	Thermally conductive ceramic				
Colour	Salmon				
Gauge	mm	0.2 ^{+0.05 to -0.05}	0.3 ^{+0.1 to 0}	0.45 ^{+0.05 to -0.05}	0.8 ^{+0.1 to 0}
Outgassing (LMW Siloxane)	ppm	∑ D3 - D10 = < 10			
MECHANICAL 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
Volume resistivity	Ωm	1.8 x 10 ¹²	1.8 x 10 ¹²	1.2 x 10 ¹²	1.0 x 10 ¹²
Dielectric constant (1 kHz)		3.8	4.2	4.3	4.3
Flammability rating		UL 94 V0	UL 94 V0	UL 94 V0	UL 94 V0
THERMAL PROPERTIES					
Thermal conductivity	W/mK	1.9	1.9	1.9	1.9
Thermal resistance ³ (inch ²)	°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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Thermally conductive materials
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Image may differ from the original product.

PRODUCT AVAILABILITY

- All standard configurations (see page 128)
- Non-adhesive or adhesive on one side
- In roll form up to 50 m (except KU-CG 80) according to customer specifications
- Stamped and cut according to customer specifications
- In sheet form:

CG 20	320 mm x 1000 mm
CG 30	320 mm x 1000 mm
CG 45	320 mm x 1000 mm
CG 80	300 mm x 1000 mm
Adhesive on one side	320 mm x 1000 mm