

THERMAL CONDUCTIVITY  
(W/m·°K)

**4,5**

Electrically insulating



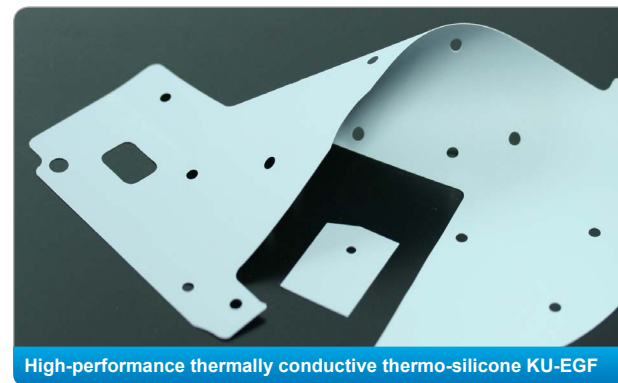
The Heatmanagement  
Company

## High-performance thermally conductive thermo-silicone KU-EGF

HEATPAD® KU-EGF is a fiberglass reinforced silicone foil filled with ceramics for superior thermal conductivity. Its implementation allows for extremely low total thermal transfer resistance, making it ideal for applications involving critical temperatures.

### PROPERTIES

- Very high thermal conductivity
- Extremely low 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

<sup>1</sup> Voltage ramp 1000 V/s

<sup>2</sup> Step-by-step voltage increments until dielectric breakdown

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

PART	KU-	EGF20	EGF30	EGF45
<b>GENERAL PROPERTIES</b>				
Material	Fiberglass reinforced silicone			
Filler	Thermally conductive ceramic			
Colour	Blue-grey			
Gauge	mm	0,2 <sup>-0,05 to +0,05</sup>	0,3 <sup>-0,05 to +0,05</sup>	0,45 <sup>-0,05 to +0,05</sup>
Density	g/cm <sup>3</sup>	3,1	3,1	3,1
Outgassing (LMW Siloxane)	ppm	Σ D3 - 10 = <10		
<b>MECHANICAL PROPERTIES</b>				
Tensile strength	MPa	18	17	15
Tear strength	kN/m	70	50	55
Hardness (Shore A)		91	91	91
<b>ELECTRICAL PROPERTIES</b>				
Breakdown Voltage (Voltage ramp) <sup>1</sup>	V (AC)	4000	7000	8000
Breakdown Voltage (Voltage steps) <sup>2</sup>	V (AC)	2000	5000	6000
Dielectric Constant (1kHz)		6,5	6,5	6,5
Volume Resistivity	(Ωm)	2,50 x 10 <sup>13</sup>	2,20 x 10 <sup>13</sup>	1,90 x 10 <sup>13</sup>
<b>THERMAL PROPERTIES</b>				
Thermal conductivity	W/mK	4,5	4,5	4,5
Thermal resistance <sup>3</sup> (inch <sup>2</sup> )	°C/W	0,22	0,30	0,44
Operating temperature	°C	-60 to +200	-60 to +200	-60 to +200

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