

THERMAL CONDUCTIVITY

(W/m²K)**5,0**

Electrically insulating

The Heatmanagement
Company

High-performance thermally conductive thermo-silicone film KU-BG

HEATPAD® KU-BG is a silicone foil filled with boron nitride for excellent thermal conductivity, and reinforced with fiberglass. Its very soft texture adapts superbly to the contact surfaces so that thermal contact resistance and total thermal transfer resistance are reduced to a minimum. It meets the highest technical standards for interface materials.

PROPERTIES

- Extremely high thermal conductivity
- Minimal thermal 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)



High-performance thermally conductive thermo-silicone KU-BG

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-	BG20	BG30	BG45	BG80
GENERAL PROPERTIES					
Material	Fiberglass reinforced silicone				
Filler	Thermally conductive ceramic (Boron Nitride)				
Colour	White				
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/cm ³	1,5	1,5	1,5	1,5
Outgassing (LMW Siloxane)	ppm	Σ D3 - D10 = <10			
MECHANICAL PROPERTIES					
Tensile strength	Mpa	51,0	50,0	49,0	14,0
Tear strength	kN/m	197	223	209	54
Hardness (Shore A)		85	85	85	85
ELECTRICAL PROPERTIES					
Breakdown Voltage (Voltage ramp) ¹	V (AC)	7000	12000	16000	21000
Breakdown Voltage (Voltage steps) ²	V (AC)	2000	5000	7000	12000
Dielectric Constant (1 kHz)		3,0	3,1	2,9	2,9
Volume Resistivity	Ωm	8,0 x 10 ¹²	10,0 x 10 ¹²	9,0 x 10 ¹²	11,0 x 10 ¹²
THERMAL PROPERTIES					
Thermal conductivity	W/mK	5,0	5,0	5,0	5,0
Thermal resistance ³ (inch ²)	°C/W	0,19	0,25	0,35	0,63
Operating temperature	°C	-60 to +200	-60 to +200	-60 to +200	-60 to +200

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