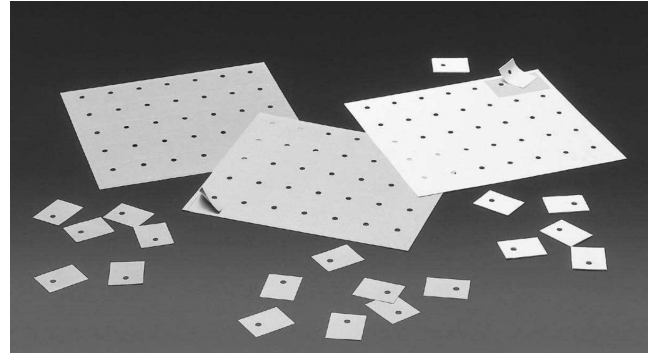


Glass-Fibre reinforced Silicone based Film / BFG Series

Glass-fibre reinforced for a better mechanical stability

BFG and BFG-A series is silicone based rubber - fibreglass reinforced, electrically insulating with exceptionally good heat-conducting Boron Nitride ceramics which has excellent long-term mechanical stability as well as excellent thermal conductivity. BFG (cheaper and lower thermal conductivity version) as BFG-A also has a very high longevity and the associated high reliability.

Boron Nitride materials are the best materials among thin films, suitable for the production of pads under discrete packages and for cuts of different shapes and belts. They are required for thermally & mechanically demanded applications with good electrical insulation.



PROPERTIES

High thermally conductive silicone based electrically insulated Boron-Nitride film with perfect mechanical stability, very long life and reliability. Ideal replacement of thermal grease + Mica under discrete TO – Packages and other non insulating parts.

AVAILABILITY

Standard Sheets 440mm x 510mm
Possibility on Roll 440mm, other width belts on request, Standard TO- formats
Die cut parts, various formats on request,
Pads in standard TO – discrete packages
Non tacky standard , self adhesive on one side available on request (higher Rth)

APPLICATION EXAMPLES

Heat Transfer of MOSFET, IGBT, Diode, Thyristor, Hybrid modules in all discrete semiconductors in TO and non-insulated packages
All power electronic, power supplies, servo drive, controller and inverters, battery units, UPS, welding, inducting heating etc.

Properties	Unit	BFG30	BFG08-A	BFG20-A	BFG30-A	BFG45-A
Material Filler		Silicon – glass fibre Bornitrid	Silicon – glass fibre Bornitrid	Silicon – glass fibre Bornitrid	Silicon – glass fibre Bornitrid	Silicon – glass fibre Bornitrid
Colour		White	White	White	White	White
Thickness	mm	0,30	0,080	0,20	0,30	0,45
Thermal and Electrical						
Thermal resistance (TO-3)	°C/W	0,20	0,08	0,12	0,15	0,19
Thermal conductivity	W/m*K	4,10	5,00	5,00	5,00	5,00
Operating temperature	°C	-60 °C to 180 °C	-60 °C to 180 °C	-60 °C to 180 °C	-60 °C to 180 °C	-60 °C to 180 °C
Storage temperature	°C	0° C to 40°C	0° C to 40°C	0° C to 40°C	0° C to 40°C	0° C to 40°C
Dielectric strenght	V(AC)	6500	-	3000	6000	9000
Volume resistance	Ω/cm	2,40 x 10 ¹⁵	5,30 x 10 ¹⁵	1,70 x 10 ¹⁵	7,90 x 10 ¹⁵	9,20 x 10 ¹⁵
Dielectric constant	-	3,6	2,0	3,3	3,3	3,3
UL flammability rating	UL	V-0	V-0	V-0	V-0	V-0
Mechanical						
Hardness	Shore A	88	90	90	90	89
Breaking strength (kN/m)	(kN/m)	88	38	41	37	36
Tensile strength	MPa	20	8	9	8	5
Density	g/cm ³	1,7	1,7	1,7	1,7	1,7
Outgassing (LMW Siloxane) sum D3-10	ppm	<5	<14	<14	<14	<14
Folding ability Given				YES		
Clean, fast and process-safe assembly				YES		
Thermal compound required				NO		

Test Methods: All data without warranty and subject to change. Please contact us for further data and information.