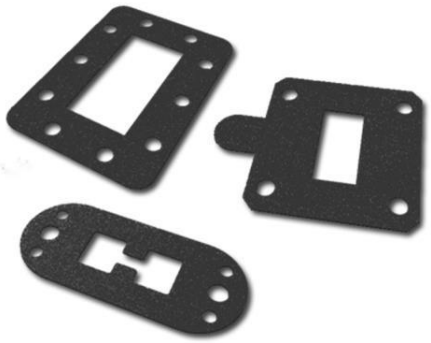
Quasar Microwave Technology Limited

JNG-WG002 CONDUCTIVE WAVEGUIDE FLANGE GASKET MATERIAL

PRODUCT OVERVIEW

JNG-WG002 is an electrically conductive gasket material that has been specifically designed for waveguide flange applications. It is an electrically conductive composite material comprising of silicone elastomer and nickel coated graphite particles.

It is formulated to provide a high level of tear strength and offers flow resistance under high compression forces in the absence of mechanical compression limits. JNG-W002 offers a superior alternative to metal shims and other waveguide gasket options.



The material provides excellent resistance to extremes of temperature and long term ageing.

AVAILABLE FORMS

JNG-WG002 is available to suit a range of flange sizes from WG11A through to WG22. Standard gasket thickness is 0.5mm but can be supplied to meet customer requirements. Quasar Microwave Technology have gaskets in stock & offer a bespoke service to customer specific drawings if required. Gaskets are supplied without backing adhesive as standard, however gaskets can be supplied with a conductive adhesive upon request.

Cured Properties	
Colour	Dark Grey
Density	2.0 gcm-3
Hardness	80 Shore A
Volume resistivity	<0.05 Ω.cm
Tensile strength	2.5 MPa
Tear strength	15 kN/m
Elongation (minimum before break)	200%
Compression set – 72 hours at 100oC	<10%
Service temperature range	-55^{o}C to 160^{o}C
Maximum Intermittent temperature	200^{o}C

Shielding Effectiveness	
200kHz (H field)	75dB
100MHz (E field)	>100dB
500MHz (E field)	>100dB
2GHz (Plane wave)	>100dB
10GHz (Plane wave)	>100dB

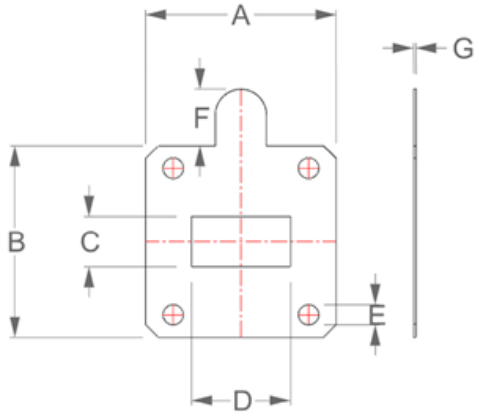


Diagram A

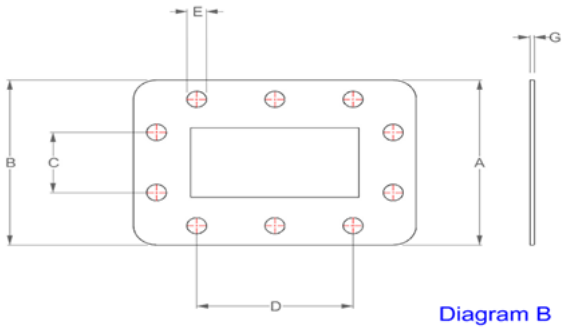


Diagram B

Waveguide		A	B	C	D	E	F	G	Dia	lange
UK Size	EIA Size	mm	mm	mm	mm	mm	mm	mm		
WG11A	WR229	98.36	69.62	29.38	58.48	6.86	N/A	0.5	B	CPR
WG14	WR137	67.30	48.20	16.05	35.10	5.20	N/A	0.5	B	CPR
WG15	WR112	63.00	44.00	12.92	28.80	4.34	N/A	0.6	B	CPR
WG15	WR112	47.60	47.60	12.87	28.70	4.30	14.00	0.5	A	UBR
WG16	WR90	41.20	41.20	10.46	23.16	4.29	11.00	0.5	A	UBR
WG17	WR75	37.25	37.25	9.80	19.30	4.00	11.00	0.5	A	UBR
WG18	WR62	33.10	33.10	8.15	16.05	4.00	11.00	0.5	A	UBR
WG20	WR42	22.16	22.16	4.57	10.92	3.00	7.00	0.5	A	UBR
WG22	WR28	18.85	18.85	3.81	7.36	3.00	6.50	0.6	A	UBR

Please call QMTL for any custom requirements.

Quasar Microwave Technology Ltd.
8 Cannon Road
Heathfield
Newton Abbot
Devon
TQ12 6SH

TEL: +44(0) 1626-897730

Web: www.qmtl.co.uk