

WAVEGUIDE ISOLATORS & CIRCULATORS

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NOTES FOR WAVEGUIDE DEVICES

RACOMTECH waveguide isolators and circulators are designed for a wide range of high performance applications at a low cost. These devices operate at frequencies from 7.70 to 100GHz. All units have standard flanges associated with the particular waveguide size.

- Features
 - Custom design
 - Wide range of standard products
- High Performance
 - All standard flange types are available
- Frequency range
 - Standard frequency range of 7.70 to 100GHz
 - Non standard waveguide bands can be offered.
- Waveguide and Flanges
 - Standard waveguide size from WR-430 to WR-10
 - Standard EIA flanges with the particular waveguide sizes
 - Other waveguide and flange types available
- Temperature range
 - Standard temperature range -30 to +70°C
 - Electrical parameters perform at the standard operating temperature range.
 - Other temperature ranges are available (Please contact RACOMTECH)
- Materials and Plating
 - Clear anodized aluminium or silver plated brass
 - Painting available on request
- Mechanical mounting
 - The gap between the ferrite waveguide device and the adjacent device to which it is to be connected must be tightly controlled. This becomes very critical at the higher frequencies.
- Custom features
 - RACOMTECH has the ability to provide a wide range of solutions to meet most application

WAVEGUIDE ISOLATORS

WR-112, WR-75, WR-62, WR-90

Model	Frequency Range (GHz)	Bandwidth (MHz)	Insertion Loss (dB.Max)	Isolation (dB.Min)	VSWR (Max)	Dimension (mm)	Connection
BG84-36	7.7-8.4	full	0.3	23	1.2	36*75.5*48	WR112
BG84-69.2	7.25-8.4	full	0.4	20	1.25	69.2*83.3*44.5	WR112
BG100-70	10.0-11.0	full	0.4	20	1.15	70*42*42	WR90
BG100-28	8.0-12.4	300	0.2	30	1.15	28*56*42	WR90
		1000	0.3	23	1.2		
BG120-25	10.0-15.0	500	0.25	25	1.15	25*52*38	WR75
		1000	0.3	23	1.2		
BG120-28M	10.0-15.0	500	0.25	25	1.15	28*52*38	WR75 With sealing groove
		1000	0.3	23	1.2		
BG140-21	12.0-18.0	500	0.3	25	1.15	21*52*33.3	WR62
		1000	0.3	23	1.2		

Note:

- OPERATING TEMPERATURE: -30°C to +70°C
- LOAD POWER RATING CAN BE 0.5W OR 2W - SPECIFY HIGHER POWER RATING IF REQUIRED
- FORWARD POWER RATING BE 10W OR 2W - SPECIFY HIGHER POWER RATING IF REQUIRED
- CIRCULATION IS CLOCKWISE UNLESS OTHERWISE SPECIFIED



WAVEGUIDE ISOLATORS

WR-34, WR-42, WR-51, WR-62, WR-75, WR-90

Model	Frequency Range (GHz)	Bandwidth (MHz)	Insertion Loss (dB.Max)	Isolation (dB.Min)	VSWR (Max)	Dimension (mm)	Flange
BG100-12.7	8.0-12.4	300	0.4	25	1.2	12.7*48.5*42	WR90
		1000	0.5	20	1.25		
BG120-12.7	10.0-15.0	300	0.3	20	1.2	12.7*43*38	WR75
BG140-12.7	12.0-18.0	500	0.3	23	1.2	12.7*38.3*33.3	WR62
		1000	0.4	20	1.25		
BG140-12.7A	12.0-18.0	1000	0.4	20	1.25	12.7*39.88*22.35	WR62
BG180-15	14.5-22.0	1000	0.3	25	1.2	15*40*33.3	WR51
BG180-15A	14.5-22.0	1000	0.3	25	1.2	15*40*30.2	WR51
BG220-9.5	17.6-26.7	2000	0.4	18	1.3	9.5*31.75*22.4	WR42
BG220-9.5A	17.6-26.7	2000	0.4	18	1.3	9.525*31.75*22.35	WR42
BG220-12.7	17.6-26.7	500	0.3	28	1.15	12.7*32*22.4	WR42
		1000	0.4	23	1.2		
BG220-12.7A	17.6-26.7	2000	0.5	20	1.25	12.7*31.75*23.6	WR42
BG260-9.5A	24.5-26.5	full	0.4	17	1.4	9.525*31.75*22.35	WR34
	27.5-29.5						
BG260-12.7	21.7-33.0	1000	0.3	23	1.2	12.7*32*21.1	WR34

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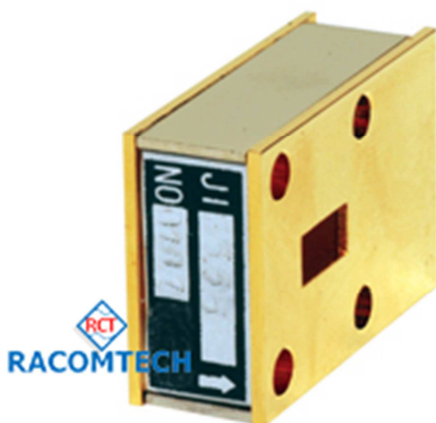
WAVEGUIDE ISOLATORS

WR-10, WR18, WR-22, WR-28

Model	Frequency Range (GHz)	Bandwidth (MHz)	Insertion Loss (dB.Max)	Isolation (dB.Min)	VSWR (Max)	Dimension (mm)	Flange
BG320-5	26.5-40.0	1000	0.5	20	1.2	5*25.4*19.1	WR28
BG320-9.5A	37-40.0	full	0.4	17	1.4	9.525*31.75*22.35	WR28
BG320-10	26.5-40.0	1000	0.3	25	1.2	10*28*19.1	WR28
		2000	0.35	22	1.22		
BG320-10B	26.5-40.0	1000	0.3	25	1.2	10*28*19.1	WR28
		2000	0.35	22	1.22		
BG320-12.7L	26.5-40.0	3000	0.4	20	1.25	12.7*31.75*19.1	WR28
BG320-12.7L1	26.5-40.0	3000	0.4	20	1.25	12.7*32*19.56	WR28
BG320-15	26.5-40.0	1000	0.3	25	1.2	15*28*19.1	WR28
BG320-20	33.4-36.6	full	1	40	1.25	20*28*19.1	WR28
BG320-30	33.4-36.6	full	1.5	60	1.25	30*28*19.1	WR28
BG400-10	32.9-50.1	1000	0.6	25	1.2	10*26*19.1	WR22
		2000	0.6	23	1.25		
BG500-10	39.2-59.6	1000	0.6	25	1.2	10*25.5*19.1	WR18
		2000	0.6	23	1.25		
BG900-10A	84.0-100.0	1000	0.8	25	1.25	10*22*19.1	WR10
		2000	1	20	1.3		

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WAVEGUIDE CIRCULATOR

WR-28, WR-34, WR-42, WR-51, WR-62, WR-75, WR-90, WR-112

Model	Frequency Range (GHz)	Bandwidth (MHz)	Insertion Loss (dB.Max)	Isolation (dB.Min)	VSWR (Max)	Dimension (mm)	Flange
BH84-60	7.7-8.4	full	0.3	25	1.15	60*65*47.8	WR112
BH100-48	8.0-12.4	1000	0.3	23	1.15	48*53*42	WR90
BH100-60M	8.0-12.4	1000	0.3	23	1.2	60*70*40.4	WR90
							With sealing groove
BH100-27	8.0-12.4	100	0.2	35	1.1	27*46.5*42	WR90
		500	0.3	25	1.15		
BH120-42	10.0-15.0	300	0.2	28	1.1	42*48*38	WR75
		1000	0.3	25	1.15		
BH140-40	12.0-18.0	500	0.3	25	1.15	40*40*33.3	WR62
		1000	0.4	23	1.2		
BH180-32	14.5-22.0	1000	0.3	23	1.2	32*35*30.2	WR51
BH220-22.2	17.6-26.7	2000	0.4	20	1.25	22.2*31.75*22.4	WR42
BH220-24	17.6-26.7	1000	0.3	23	1.2	24*27*22.4	WR42
		2000	0.4	20	1.25		
BH220-25.4	18.5-26.5	1000	0.3	23	1.2	25.4*27*22.4	WR42
		2000	0.4	20	1.25		
BH260-22.3	21.7-33.0	1000	0.3	23	1.2	22.3*27*21.2	WR34
BH320-21	26.5-40.0	500	0.3	25	1.15	21*24*19.1	WR28
		1000	0.3	23	1.2		

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