

## Series 23 Waveguide Bandwidth Feeds

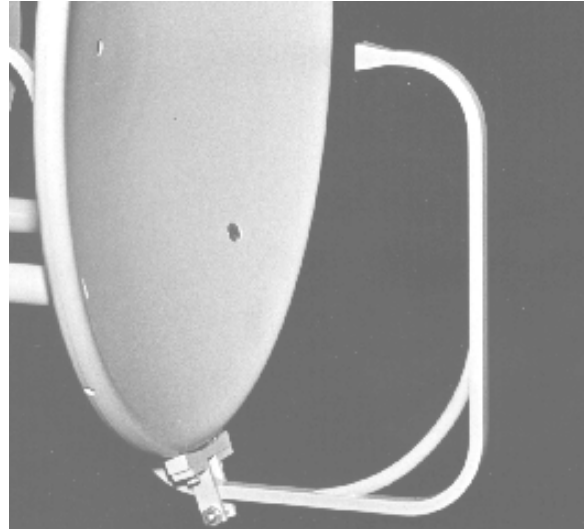
### Features

- Series 23 feeds offer wide frequency coverage from 1.1 to 40 GHz
- Rugged construction ensures a long, useful life

### Description

Model 23 Feeds are linearly polarized feeds covering the frequency range of 1.1 GHz to 40 GHz. All Model 23 feeds are waveguide horns which are weather sealed with a radome cover. These feeds are designed to be used with Series 22 reflectors.

The feed terminating connectors are shown in the table of specifications. Model 23-8.2 through Model 23-26 are provided with a button hook waveguide section to permit a rear waveguide input. To minimize aperture blocking, feeds for the Model 22A-1 reflector are supported beside the reflector, with the waveguide passing around the reflector edge. MI Technologies Series 11 Coax-to-Waveguide Adaptors may be used to provide a coaxial cable input to the waveguide.



1819

### Specifications

Feed Model No. <sup>1</sup>	Reflector	Nominal Range (GHz)	Nominal Gain (dB)	Beamwidth (degrees)	Maximum VSWR	Nominal 1st Side Lobe Suppression (dB)	Feed Connector Type or Equivalent	Net Weight lbs (kg)	Shipping Weight lbs (kg)
23-1.7/8/10	22-10A	1.70-2.60	33	3.8	1.5	18	UG-437/U	8 (3.6)	20 (9)
23-1.7/8/10	22-8B	1.70-2.60	31	4.6	1.5	18	UG-437/U	8 (3.6)	20 (9)
23-2.6/8	22-8B	2.60-3.95	35	3.1	1.5	18	UG-584/U	4 (1.8)	15 (6.8)
23-3.9/8	22-8B	3.95-5.85	39	2.1	1.5	18	UG-149/U	4 (1.8)	10 (4.5)
23-5.8/8	22-8B	5.85-8.20	42	1.6	1.5	18	UG-441/U	2 (0.9)	5 (2.3)
23-2.6/4/6	22-6B	2.60-3.95	32	4.0	2.0	18	Type N	4 (1.8)	15 (6.8)
23-3.9/4/6	22-6B	3.95-5.85	36	3.0	1.5	18	UG-149/U	4 (1.8)	10 (4.5)
23-5.8/4/6	22-6B	5.85-8.20	39	2.0	1.5	18	UG-441/U	2 (0.9)	5 (2.3)
23-8.2/6	22-6B	8.20-12.4	42	1.5	1.5	18	UG-135/U	5 (2.3)	25 (11.4)
23-2.6/4/6	22-4A	2.60-3.95	29	6.0	2.0	18	Type N	4 (1.8)	15 (6.8)
23-3.9/4/6	22-4A	3.95-5.85	32	4.0	1.5	18	UG-149/U	2 (0.9)	10 (4.5)
23-5.8/4/6	22-4A	5.85-8.20	35	3.0	1.5	18	UG-441/U	2 (0.9)	5 (2.3)
23-8.2/4	22-4A	8.20-12.4	39	2.0	1.5	18	UG-135/U	2 (0.9)	25 (11.4)
23-12/4	22-4A	12.4-18.0	42	1.5	1.5	18	UG-419/U	2 (0.9)	20 (9)
23A-8.2/2	22A-2	8.20-12.4	33	4.0	1.5	15	UG-135/U	3 (1.4)	25 (11.4)
23A-12/2	22A-2	12.4-18.0	36	3.0	1.5	15	UG-419/U	2 (0.9)	20 (9)
23A-12/1	22A-1	12.4-18.0	30	5.0	1.5	18	UG-419/U	1 (0.5)	20 (9)
23A-18/1	22A-1	18.0-26.5	33	4.0	1.5	18	UG-595/U	1 (0.5)	15 (6.8)
23A-26/1	22A-1	26.5-40.0	37	2.5	1.5	18	UG-599/U	1 (0.5)	10 (4.5)

<sup>1</sup>Numbers following “/” indicate reflector diameters (in feet) for which the feed is recommended. All specifications define combined performance when installed in a Series 22 parabolic reflector.

# Products - Antennas and Components

## Series 23 Waveguide Bandwidth Feeds - continued

Model 23-	Frequency GHz	Peak <sup>1</sup>	Radome Dimensions <sup>3</sup>	Avg. <sup>1,2</sup>	Window Thickness <sup>3</sup>		Notes
					RX2200 Rexolite	W2 Mylar	
1.7/8/10	1.7-2.6	18 MW	6.8 X 5.2 (17.3 X 13.2)	15kW		0.005 (0.013)	RG-105/U
2.6/4/6	2.6-3.95	2.5 kW	4.5 X 3.3 (11.4 X 8.4)	90 W		0.005 (0.013)	Type N/RG-214
2.6/8	2.6-3.95	7.6 MW	4.5 X 3.3 (11.4 X 8.4)	10 kW		0.005 (0.013)	RG-75/U 6061
3.9/4/6	3.95-5.85	3.3 MW	3.0 X 2.2 (7.6 X 5.6)	4 kW		0.005 (0.013)	RG-95/U
3.9/8	3.95-5.85	3.3 MW	3.0 X 2.2 (7.6 X 5.6)	4 kW		0.005 (0.013)	RG-95/U 6061
5.8/4/6	5.85-8.2	1.9 MW	2.11 X 1.55 (5.4 X 3.9)	1.5 kW		0.005 (0.013)	RG-106/U
5.8/8	5.85-8.2	1.9 MW	2.11 X 1.55 (5.4 X 3.9)	1.5 kW		0.005 (0.013)	RG-106/U 6061
8.2/2	8.2-12.4	0.7 MW	1.46 X 1.07 (3.7 X 2.7)	0.7 kW		0.005 (0.013)	RG-67/U
8.2/4	8.2-12.4	0.7 MW	1.46 X 1.07 (3.7 X 2.7)	0.7 kW		0.005 (0.013)	RG-67/U
8.2/6	8.2-12.4	0.7 MW	1.46 X 1.07 (3.7 X 2.7)	0.7 kW		0.005 (0.013)	RG-57/U 6061
12/1	12.4-18.0	0.4 MW	0.97 X 0.71 (2.5 X 1.8)	0.4 kW	0.050 (0.13)		RG-91/U
12/2	12.4-18.0	0.4 MW	0.97 X 0.71 (2.5 X 1.8)	0.4 kW	0.050 (0.13)		RG-91/U
12/4	12.4-18.0	0.4 MW	0.97 X 0.71 (2.5 X 1.8)	0.4 kW	0.050 (0.13)		RG-91/U Brass
18/1	18.0-26.5	0.17 MW	0.66 X 0.48 (1.7 X 1.2)	0.14 kW	0.050 (0.13)		RG-53/U Brass
26/1	26.5-40.0	0.096 MW	0.43 X 0.03 (1.1 X 0.08)	0.09 kW	0.030 (0.08)		RG-271 Brass

<sup>1</sup> Ref. MIL-STD-1358B.

<sup>2</sup> Derated for typical VSWR.

<sup>3</sup> All dimensions in inches (cm).

### Ordering Information

When ordering one of the Series 23 feeds for use with a Series 22 parabolic reflector, check specifications for each unit to ensure compatibility.

### Options

Not applicable

### Accessories

Series 22 Parabolic Reflectors