

# Technical Characteristics

## Electrical

	FBI-42	FBI-28	FBI-22	FBI-19	FBI-15	FBI-12	FBI-10	FBI-08	FBI-06	FBI-05
<b>Frequency Band and Range (GHz)</b>	K 18-26.5	Ka 26.5-40	Q 33-50	U 40-60	V 50-75	E 60-90	W 75-110	F 90-140	D 110-170	G* 140-220
<b>Insertion Loss (dB) (max)</b>	CF	1.5	1.5	1.7	1.8	2.0	2.5	2.8	3.2	4.0
<b>Insertion Loss (dB) (typ)</b>	CF	1.0	1.1	1.2	1.6	1.7	2.0	2.2	2.9	3.5
<b>Isolation (dB) (min)</b>	25	27	27	27	27	27	27	20	20	20
<b>Input/Output VSWR (max)</b>	CF	1.4:1	1.4:1	1.4:1	1.4:1	1.4:1	1.4:1	1.4:1	1.4:1	1.4:1
<b>Power Rating (W) (max)</b>	3.0	2.5	2.0	1.5	1.5	1.0	1.0	0.75	0.75	0.75

\*The performance of G-band (WR-05) isolators is measured at selected frequencies within the band. Performance specifications given above are typical values measured in the frequency band.  
CF= Consult our Northampton, MA office for specifications.

## Outline Drawings

Figure 1 - G-Band FBI-05-ASES0

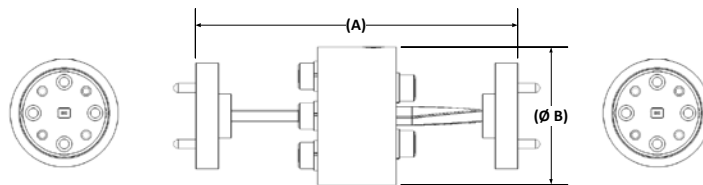


Figure 2 - W-Band FBI-10-RSES0

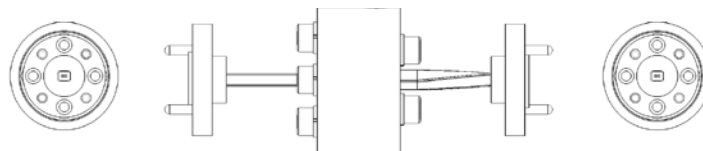
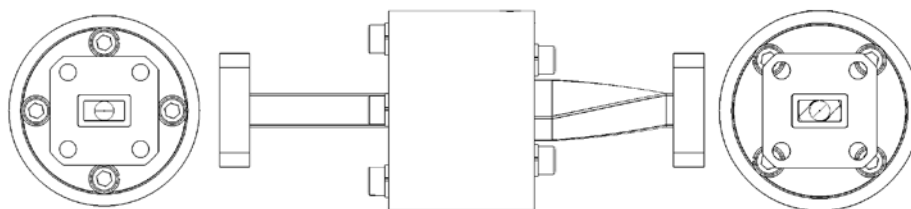


Figure 3 - Ka-Band FBI-28-SSES0



# Technical Characteristics

## Mechanical

	FBI-42	FBI-28	FBI-22	FBI-19	FBI-15	FBI-12	FBI-10	FBI-08*	FBI-06*	FBI-05*
<b>A (in/mm)</b>	4.32/109.73	3.19/81.03	2.69/68.33	2.62/66.55	2.56/65.02	2.51/63.75	2.46/62.48	2.33/59.18	2.31/58.67	2.29/58.17
<b>B (in/mm)</b>	1.44/36.58	1.31/33.27	1.31/33.27	1.31/33.27	0.98/24.89	0.98/24.89	0.98/24.89	0.98/24.89	0.98/24.89	0.98/24.89
<b>Flange MIL-DTL-3922</b>	/54-001	/54-003 OR /67C-005	/67C-006	/67C-007	/67C-008	/67C-009	/67C-010	/67C-M08	/67C-M06	/67C-M05

\*Flange Pattern Compatible with MIL-DTL-3922/67C. Refer to IS000131.

# How To Order

Specify Model Number: **FBI-XX-YBCDO Series**

	FBI - XX - Y B C D O
<b>FBI Series Name</b>	FBI Series
<b>XX Waveguide Band</b>	WR - Number -42 -28 -22 -19 -15 -10 -08 -06 -05
<b>Y Flange Type</b>	A Precision, Flat (WR-08 to WR-05 Only) R Round (WR-28 to WR-10) S Square (WR-42 and WR-28 Only)
<b>B Input Waveguide Configuration</b>	S Straight (Standard) E 90° E-plane bend (WR-42 through WR-10 Only) H 90° H-plane bend (WR-42 through WR-10 Only)
<b>C Input to Output Waveguide Configuration</b>	E E-plane to E-plane (Standard) H H-plane to E-plane
<b>D D.C. Block Options</b>	S Standard Version (No D.C. Block) B Block Version (WR-42 through WR-10 only)

**Example:** To order a FBI Series fullband isolator in WR-10 waveguide band with a round flange, 90° E-plane bend, E- to E-plane configuration and a D.C. block, specify: FBI-10-REEBO