

WR-42 Bandpass Waveguide Filter With a 17.7 GHz to 23.55 GHz Pass Band

The FMW42F011 is a WR-42 bandpass filter with UG Cover Flanges. The pass band is 5850 MHz, or 17.7 to 23.55 GHz. Implementing a waveguide design, the filter has excellent rejection of 65 dB minimum at 10 to 15 GHz and 65 dB minimum at 25.25 to 31 GHz, or about 2700 MHz and 1700 MHz from the band edge. It has a maximum insertion loss of 0.5 dB.

Electrical Specifications (Values at 25°C, sea level)

Description	Min	Typ	Max	Units
Passband Frequency Range	17.7	-	23.55	GHz
Insertion Loss			0.5	dB
Passband VSWR			1.2:1	
Input Power			100	Watts
Peak Power			3	kWatts
L-Band Rejection 15 GHz	65			dB
H-Band Rejection 25.25 GHz	65			dB

Mechanical Specifications

Size

Length	2.56 in [65.02 mm]
Width	0.88 in [22.35 mm]
Height	0.88 in [22.35 mm]
Weight	0.1 lbs [45.36 g]

Flange 1

Waveguide Size	WR-42
Flange Material and Plating	Aluminum, Silver
Flange 1 Type	UG Cover

Flange 2

Waveguide Size	WR-42
Flange Material and Plating	Aluminum, Silver
Flange 2 Type	UG Cover

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

- Values at 25 °C, sea level



Configuration:

- Passband: Band Pass
- Flange 1: WR-42
- Flange 2: WR-42

Features:

- Passband of 5850 MHz
- 17.7 GHz to 23.55 GHz Passband
- WR-42 UG Cover Flanges
- Min rejection 65 dB at 10 to 15 GHz
- Min rejection 65 dB at 25.25 to 31 GHz
- Maximum Insertion Loss of 0.5 dB
- Max Power (CW) 100 Watts

Applications:

- Radar Systems
- Test and Measurement
- Satellite Communications
- Instrumentation
- Automotive Radar Systems

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WR-42 Bandpass Waveguide Filter With a 17.7 GHz to 23.55 GHz Pass Band from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-42 Bandpass Waveguide Filter With a 17.7 GHz to 23.55 GHz Pass Band FMW42F011](#)

URL: <https://www.fairviewmicrowave.com/wr-42-waveguide-bandpass-filter-ug-pass-band-fmw42f011-p.aspx>

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