



Bandpass Waveguide Filter With WR-42 Interface Operating from 17.7 GHz to 23.55 GHz

TECHNICAL DATA SHEET

PE-W42F011

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

Description

The PE-W42F011 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.

Configuration

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

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

Description	Minimum	Typical	Maximum	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
Lowband Rejection at 15 GHz	65			dB
Highband Rejection at 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	0.095 lbs [43.09 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Bandpass Waveguide Filter With WR-42 Interface Operating from 17.7 GHz to 23.55 GHz PE-W42F011](#)



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Flange 1

Waveguide Size
Flange Material and Plating
Flange 1 Type

WR-42
Aluminum, Silver
UG Cover

Flange 2

Waveguide Size
Flange Material and Plating
Flange 2 Type

WR-42
Aluminum, Silver
UG Cover

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

Plotted and Other Data

Notes:

- Values at 25 °C, sea level

Bandpass Waveguide Filter With WR-42 Interface Operating from 17.7 GHz to 23.55 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: <https://www.pasternack.com/wr-42-bandpass-waveguide-filter-ug-pass-band-pe-w42f011-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

PE-W42F011 CAD Drawing

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