



Bandpass Waveguide Filter With WR-90 Interface
Operating from 8.9 GHz to 9.9 GHz

TECHNICAL DATA SHEET

PE-W90F001

Features

- Passband of 1000 MHz
- 8.9 GHz to 9.9 GHz Passband
- WR-90 UG Cover and Grooved Flanges
- Min rejection 60 dB at 7.9 GHz
- Min rejection 60 dB at 11 GHz
- Maximum Insertion Loss of 0.3 dB
- Max Power (CW) 200 Watts

Applications

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

Description

The PE-W90F001 is a WR-90 bandpass filter with UG Cover and UG Grooved Flanges. The pass band is 1000 MHz, or 8.9 to 9.9 GHz. Implementing a waveguide design, the filter has excellent rejection of 60 dB minimum at 7.9 GHz and 60 dB minimum at 11 GHz, or about 1000 MHz and 1100 MHz from the band edges. It has a maximum insertion loss of 0.3 dB.

Configuration

Passband	Band Pass
Flange 1	WR-90
Flange 2	WR-90

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

Description	Minimum	Typical	Maximum	Units
Passband Frequency Range	8.9	-	9.9	GHz
Insertion Loss			0.3	dB
Passband VSWR			1.25:1	
Input Power			200	Watts
Peak Power			40	kWatts
Lowband Rejection at 7.9 GHz	60			dB
Highband Rejection at 11 GHz	60			dB

Mechanical Specifications

Size	
Length	8.27 in [210.06 mm]
Width	1.63 in [41.4 mm]
Height	1.63 in [41.4 mm]
Weight	0.955 lbs [433.18 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-90 Interface Operating from 8.9 GHz to 9.9 GHz PE-W90F001](#)



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Flange 1

Waveguide Size
Flange Material and Plating
Flange 1 Type

WR-90
Aluminum, Silver
UG Cover

Flange 2

Waveguide Size
Flange Material and Plating
Flange 2 Type

WR-90
Aluminum, Silver
UG Grooved

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

Plotted and Other Data

Notes:

- Values at 25 °C, sea level

Bandpass Waveguide Filter With WR-90 Interface Operating from 8.9 GHz to 9.9 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-90-bandpass-waveguide-filter-ug-pass-band-pe-w90f001-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-W90F001 CAD Drawing

Bandpass Waveguide Filter With WR-90 Interface Operating from 8.9 GHz to 9.9 GHz

