



Bandpass Waveguide Filter With WR-112 Interface
Operating from 7.9 GHz to 8.4 GHz

TECHNICAL DATA SHEET

PE-W112F001

Features

- Passband of 500 MHz
- 7.9 GHz to 8.4 GHz Passband
- WR-112 UG Cover and Grooved Flanges
- Min rejection 60 dB at 7.3 GHz
- Min rejection 50 dB at 9.1 GHz
- Maximum Insertion Loss of 0.2 dB
- Max Power (CW) 300 Watts

Applications

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

Description

The PE-W112F001 is a WR-112 bandpass filter with UG Cover and UG Grooved Flanges. The pass band is 500 MHz, or 7.9 to 8.4 GHz. Implementing a waveguide design, the filter has excellent rejection of 60 dB minimum at 7.3 GHz and 50 dB minimum at 9.1 GHz, or about 600 MHz and 700 MHz from the band edges. It has a maximum insertion loss of 0.2 dB.

Configuration

Passband	Band Pass
Flange 1	WR-112
Flange 2	WR-112

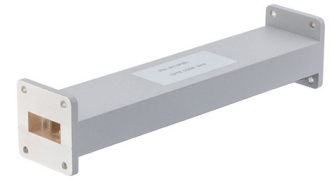
Electrical Specifications (Values at 25°C, sea level)

Description	Minimum	Typical	Maximum	Units
Passband Frequency Range	7.9	-	8.4	GHz
Insertion Loss			0.2	dB
Passband VSWR			1.3:1	
Input Power			300	Watts
Peak Power			30	kWatts
Lowband Rejection at 7.3 GHz	60			dB
Highband Rejection at 9.1 GHz	50			dB

Mechanical Specifications

Size	
Length	8.66 in [219.96 mm]
Width	1.88 in [47.75 mm]
Height	1.88 in [47.75 mm]
Weight	1.13 lbs [512.56 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-112 Interface Operating from 7.9 GHz to 8.4 GHz PE-W112F001](#)



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TECHNICAL DATA SHEET

PE-W112F001

Flange 1

Waveguide Size
Flange Material and Plating
Flange 1 Type

WR-112
Aluminum, Silver
UG Cover

Flange 2

Waveguide Size
Flange Material and Plating
Flange 2 Type

WR-112
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-112 Interface Operating from 7.9 GHz to 8.4 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.

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-112 Interface Operating from 7.9 GHz to 8.4 GHz PE-W112F001](#)

URL: <https://www.pasternack.com/wr-112-bandpass-waveguide-filter-ug-pass-band-pe-w112f001-p.aspx>

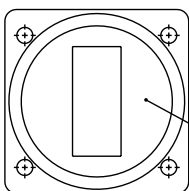
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such 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-W112F001 CAD Drawing

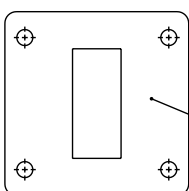
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ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	4/21/2023	KDANG	AGANWANI

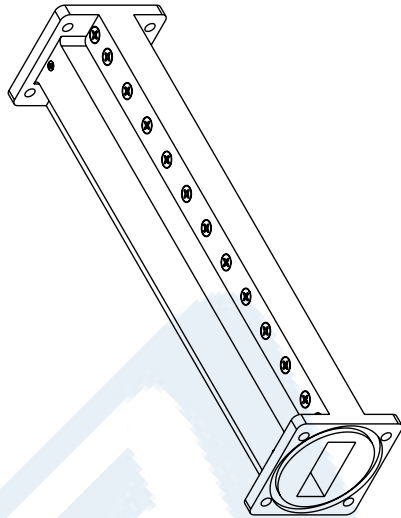
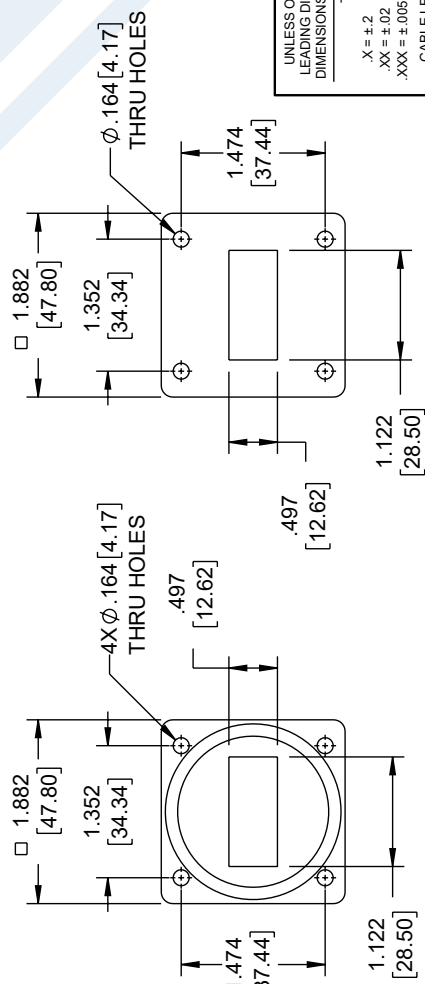
REVISION	1	2	3	4	5	6
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WR-112 WAVEGUIDE
UG GROOVED FLANGE
FBM84



WR-112 WAVEGUIDE
UG COVER FLANGE
FBP84



Website: www.Pasternack.com
Phone: 1.866.727.8376 | 1.949.261.1920

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
SCALE: NONE
SHEET: 1 OF 1

UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE IN INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:
X = ±.2 [5] FRACTIONS
XX = ±.02 [.5] ANGLES ± 1°
XXX = ±.005 [.13] CABLE LENGTH TOLERANCES:
≤12 [305] = +1 [25] / -0
>12 [305] ≤ 60 [1524] = +2 [51] / -0
>60 [1524] ≤ 120 [3048] = +4 [102] / -0
>120 [3048] ≤ 300 [7620] = +6 [152] / -0
>300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY
AND SUBJECT TO CHANGE WITHOUT NOTICE.

DESCRIPTION
WR-112 Waveguide bandpass filter, 7.9 to 8.4GHz

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SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	KDANG	PE-W112F001	A