



# WR-51 Instrumentation Grade Waveguide E-Bend with R180 Flange Operating from 15 GHz to 22 GHz

## **TECHNICAL DATA SHEET**

## **PE-W51B001**

Pasternack's instrumentation grade waveguide bends are constructed of a high quality oxygen free hard copper with high precision mechanical tolerances as tight as ±0.001" that ensures repeatable and consistent RF performance. Our commercial and instrumentation grade waveguide bends range in size from WR-12 to WR-137 and include grooved and non-grooved flanged designs. Pasternack waveguide bends are offered in E-Bend and H-Bend configurations, and each waveguide bend is labeled for easy identification. Our commercial grade waveguide bends are painted blue and our instrumentation grade versions are hard gold plated over a copper flash.

- WR-12 to WR-137 Waveguide Bends
- Grooved and Non-Grooved Flange Designs
- Available for frequency ranges between 5.8 GHz to 90 GHz
- Comprehensive waveguide offering also includes Waveguide Sections, Waveguide to Coax Adapters, Filters, Terminations, and more.
- High Precision Tolerance as Tight as ±0.001"

#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	15		22	GHz
VSWR			1.1:1	
Insertion Loss		0.09		dB

### **Mechanical Specifications**

Waveguide Size Waveguide Design		WR-51 Instrumentation Grade		
Description	Flange 1	Waveguide	Flange 2	
Interface	R180	WR-51	R180	
Material	Oxygen Free Hard Copper	Oxygen Free Hard Copper	Oxygen Free Hard Copper	
Plating	Hard Gold over Copper Flash	Hard Gold over Copper Flash	Hard Gold over Copper Flash	

#### Compliance Certifications (visit www.Pasternack.com for current document)

**RoHS** Compliant

Notes:

• Values at +25 °C, sea level

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: WR-51 Instrumentation Grade Waveguide E-Bend with R180 Flange Operating from 15 GHz to 22 GHz PE-W51B001

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 Phone: (866) 727-8376 or (949) 261-1920 • Fax: (949) 261-7451

Sales@Pasternack.com • Techsupport@Pasternack.com





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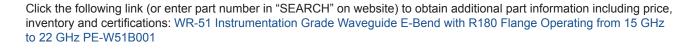
Power D	ower Data							
🎬 File	Trace/Cha	n Response	Marker/Analy	sis Stimulus				_ @ ×
Channel 1 PE-W51B001 VSWR Stop Frequency 22.200000000 GHz							Display	
11.00	Ir 1 S11 S	SWR 1.000U/	1.000					
10.00								Overlay 1x
9.00								Stack 2x
8.00								Split 3x
7.00								Quad 4x
6.00								Windows 🕨
5.00								Measurement
4.00								Setups Display
3.00								Items
2.00								More 🕨
	Ch 1 Avg							Favorites
<b>1</b> ; Cont.	Ch1: Start CH 1: S11	15.0000 GHz	z — No Cor	Avg=50	Smooth=3.48%	S	top 22.2000 GHz	LCL

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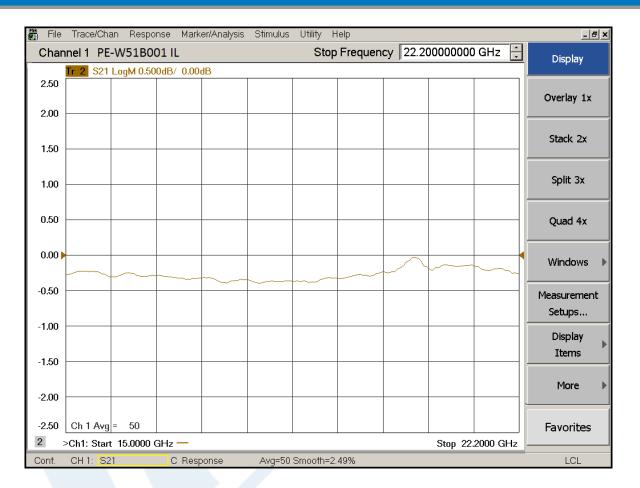
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**PEP PASTERNACK**<sup>®</sup> THE ENGINEER'S RF SOURCE

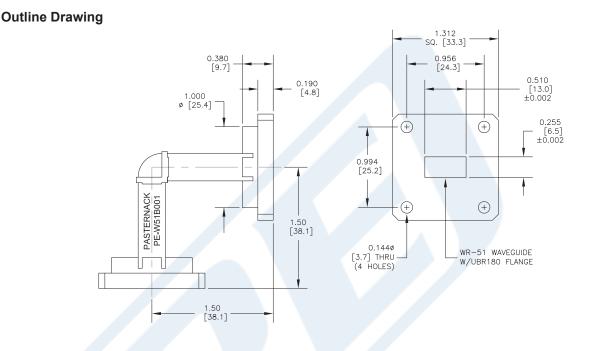




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WR-51 Instrumentation Grade Waveguide E-Bend with R180 Flange Operating from 15 GHz to 22 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability 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: WR-51 Instrumentation Grade Waveguide E-Bend with R180 Flange Operating from 15 GHz to 22 GHz PE-W51B001

URL: http://www.pasternack.com/wr-51-waveguide-e-bend-r180-flange-15-22-ghz-pe-w51b001-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.

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