



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

TECHNICAL DATA SHEET

PE-W51B002

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 H-Bend with R180 Flange Operating from 15 GHz to 22 GHz PE-W51B002](#)

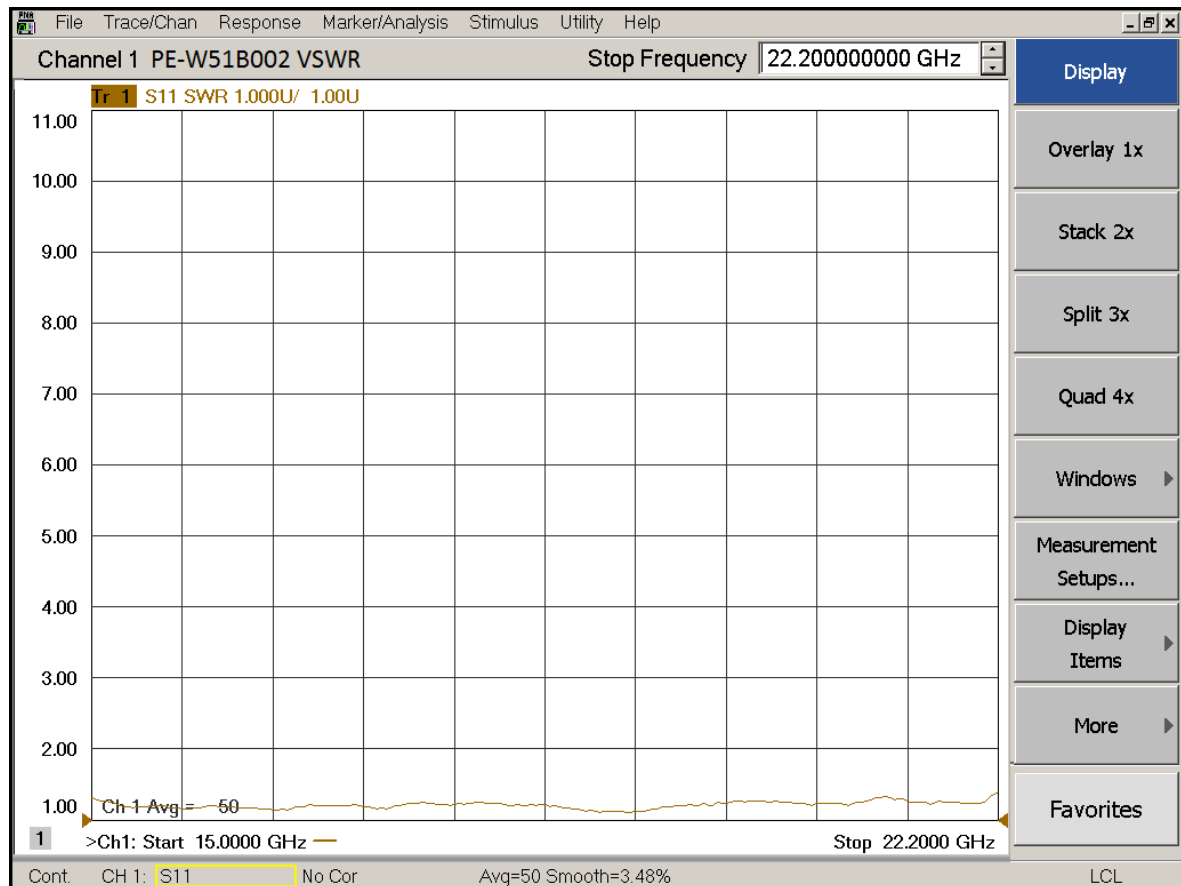


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Power Data



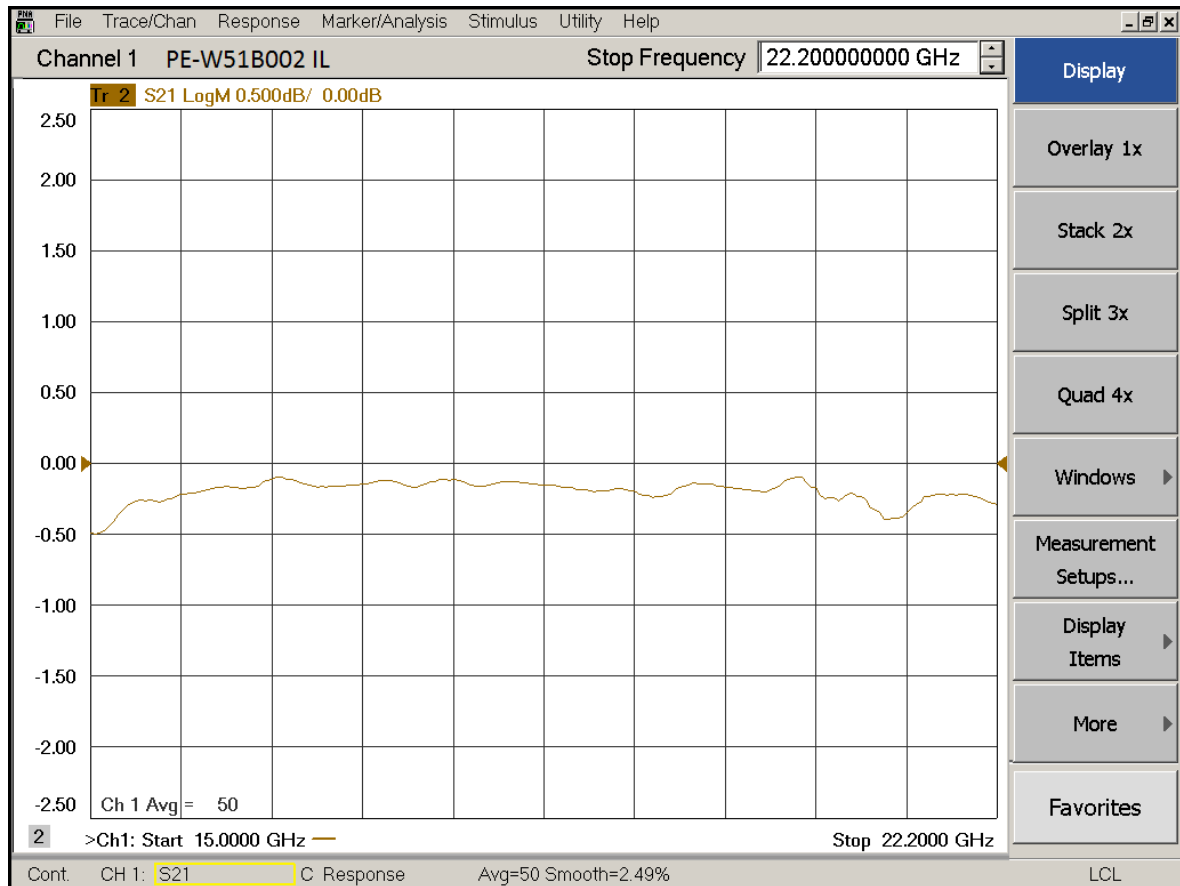
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Technical drawing of the WR-51 Waveguide W/UBR180 Flange, showing side and front views with dimensions in inches and millimeters.

Side View Dimensions:

- Overall width: 1.50 [38.1]
- Flange thickness: 0.190 [4.8]
- Waveguide body thickness: 0.380 [9.7]
- Waveguide body diameter: 1.000 ϕ [25.4]
- Waveguide body length: 1.50 [38.1]

Front View Dimensions:

- Overall width: 1.312 SQ. [33.3]
- Waveguide body diameter: 0.994 [25.2]
- Flange thickness: 0.255 [6.5] ± 0.002
- Waveguide body diameter: 0.956 [24.3]
- Waveguide body length: 0.510 [13.0] ± 0.002
- Waveguide body diameter: 0.144 ϕ [3.7] THRU (4 HOLES)

Part Identification:

PASTERNAK
PE-W51B002

WR-51 WAVEGUIDE
W/UBR180 FLANGE



PASTERNAK ENTERPRISES, INC.
UL
REGISTERED FIRM
CERTIFICATE NO. 1000457 QMC08