

# WS-1900300WG

## WR-19 Straight Waveguide 3 in.

### DEVICE OVERVIEW

#### General Description

WR-19 3" Marki Microwave Straight Waveguides, operating from 40-60 GHz, are built with high precision and gold plated for high corrosion resistance. They have very low loss and excellent VSWR. Manufactured to rigid specifications, these transmission line components provide minimum detrimental effects on overall system VSWR.



[Download s-parameters here](#)

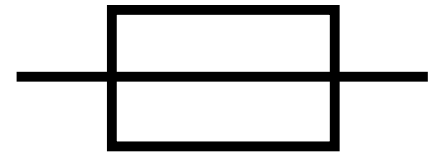
#### Features

- Copper waveguide
- Brass UG-383/U flanges
- Gold plated
- Very low loss

#### Applications

- 5G
- Radar
- Satellite Communications
- Communication Systems

#### Functional Block Diagram



#### Part Ordering Options

Part Number	Description	Package	Green Status	Product Lifecycle	Export Classification
<a href="#">WS-190030SWG</a>	WR-19 Straight Waveguide 3", Square Flange. Custom lengths available upon request.	-	REACH RoHS	Released	EAR99
<a href="#">WS-1900100WG</a>	WR-19 Straight Waveguide 1 in.	WR-19	REACH RoHS	Released	EAR99
<a href="#">WS-1900200WG</a>	WR-19 Straight Waveguide 2 in.	WR-19	REACH RoHS	Released	EAR99
<a href="#">WS-190010SWG</a>	WR-19 Straight Waveguide 1", Square Flange. Custom lengths available upon request.	-	REACH RoHS	Released	EAR99
<a href="#">WS-1900600WG</a>	WR-19 Straight Waveguide 6 in.	WR-19	REACH RoHS	Released	EAR99
<a href="#">WS-190020SWG</a>	WR-19 Straight Waveguide 2", Square Flange. Custom lengths available upon request.	-	REACH RoHS	Released	EAR99
<a href="#">WS-190060SWG</a>	WR-19 Straight Waveguide 6", Square Flange. Custom lengths available upon request.	-	REACH RoHS	Released	EAR99

Part Number	Description	Package	Green Status	Product Lifecycle	Export Classification
<u>WS-190060SWG</u>	WR-19 Straight Waveguide 6", Square Flange. Custom lengths available upon request.	-	REACH RoHS	Released	EAR99
WS-1900300WG	WR-19 Straight Waveguide 3 in.	WR-19	REACH RoHS	Released	EAR99

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## Revision History

Revision Code	Revision Date	Comment
-	2024-05-01	Initial Release

## Port Configuration and Functions

### Port Functions

Port	Function	Connector Type	Description	Equivalent Circuit for Package
Port 1	RF Input / Output	-	RF input/output port	-
Port 2	RF Input / Output	-	RF input/output port	-

## Specifications

### Package Information

Parameter	Details	Rating
Dimensions	-	L = 3 in.

**Electrical Specifications**

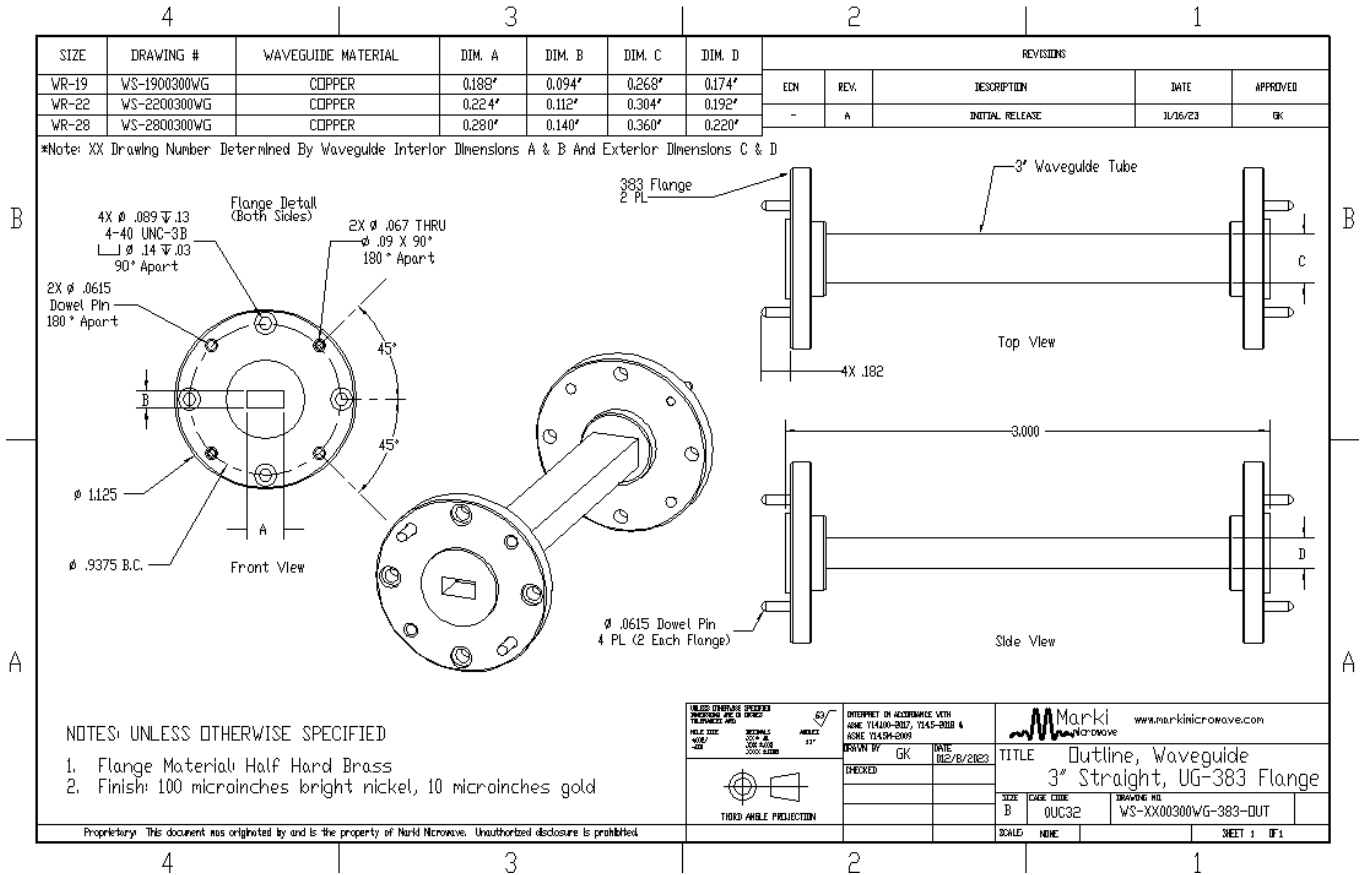
Parameter	Test Conditions	Minimum Frequency (GHz)	Maximum Frequency (GHz)	Min	Typ	Max	Unit
Insertion Loss <sup>1</sup>	-	40	60	-	0.1	-	dB
Return Loss	-	40	60	-	37	-	dB

<sup>[1]</sup> Typical insertion loss per inch.

**Mechanical Data**

**Outline Drawing**

Download : [Outline 2D Drawing](#) | [Outline 3D STP](#)



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