

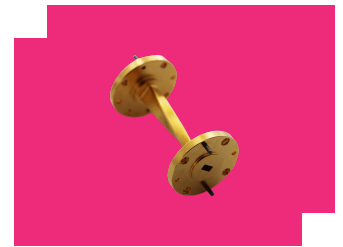
WT90-1900WG

WR-19 90-Degree Waveguide Twist

DEVICE OVERVIEW

General Description

WR-19 90-Degree Waveguide Twists, operating from 40-60 GHz, provide accurate offsets and directional changes for waveguide transmission lines. They 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
- Length = 2 in.
- 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
WT90-1900WG	WR-19 90-Degree Waveguide Twist	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 = 2 in.

Electrical Specifications

Parameter	Test Conditions	Minimum Frequency (GHz)	Maximum Frequency (GHz)	Min	Typ	Max	Unit
Insertion Loss ¹	-	40	60	-	0.13	-	dB
Return Loss	-	40	60	-	37	-	dB

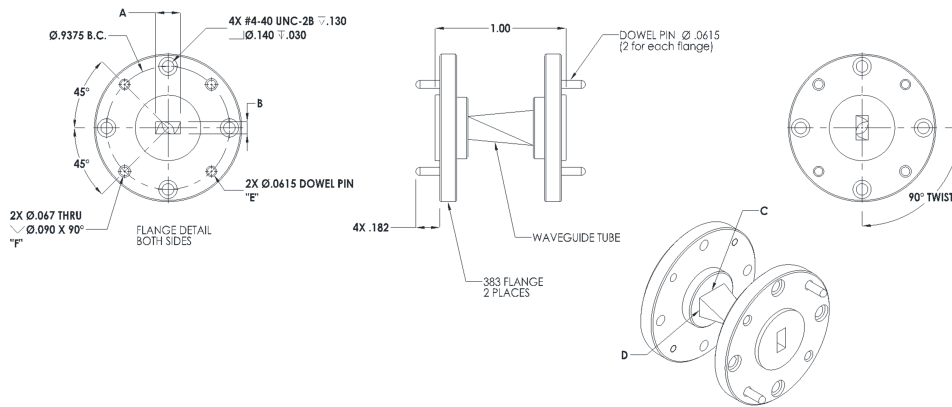
^[1] Typical insertion loss per inch.

Mechanical Data

Outline Drawing

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

SIZE	DRAWING #	DIM A	DIM B	DIM C	DIM D
WR-19	WT90-1900WG	.1880	.0940	.2680	.1740
WR-22	WT90-2200WG	.2240	.1120	.3040	.1920
WR-28	WT90-2800WG	.2800	.1400	.3600	.2200



NOTES: UNLESS OTHERWISE SPECIFIED

1. WAVEGUIDE MATERIAL: COPPER (Waveguide Tube).
2. ALL DIMENSIONS ARE IN INCH.

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