

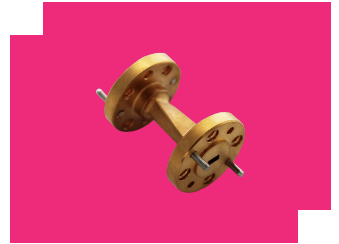
WT45-12R00WG

WR-12 45-Degree Waveguide Right Twist

DEVICE OVERVIEW

General Description

WR-12 45-degree Waveguide Right Twists, operating from 60-90 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.



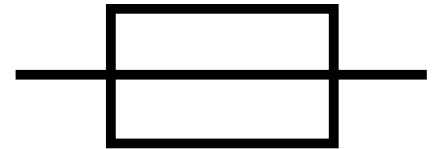
Features

- Copper waveguide
- Brass UG-387/U flanges
- Gold plated
- Length = 1 inch
- 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
WT45-12R00WG	WR-12 45-Degree Waveguide Right Twist	WR-12	REACH RoHS	Released	EAR99
WT45-12L00WG	WR-12 45-Degree Waveguide Left Twist	WR-12	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 = 1 in.

Electrical Specifications

Parameter	Test Conditions	Minimum Frequency (GHz)	Maximum Frequency (GHz)	Min	Typ	Max	Unit
Insertion Loss ¹	-	60	90	-	0.13	-	dB
Return Loss	-	60	90	-	37	-	dB

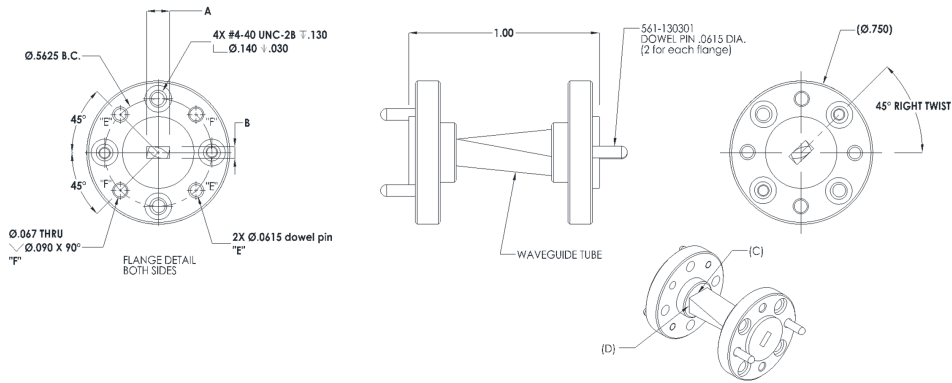
^[1] Typical insertion loss per inch.

Mechanical Data

Outline Drawing

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

SIZE	MODULE #	DIM A	DIM B	[DIM C]	[DIM D]	WAVEGUIDE MATERIAL
WR-06	WT45-06R00WG	.0650	.0325	.1450	.1125	SILVER
WR-08	WT45-08R00WG	.0800	.0400	.1600	.1200	SILVER
WR-10	WT45-10R00WG	.1000	.0500	.1800	.1300	COPPER
WR-12	WT45-12R00WG	.1220	.0610	.2020	.1410	COPPER



NOTES: UNLESS OTHERWISE SPECIFIED

1. MATERIAL: SEE THE TABLE FOR WAVEGUIDE MATERIAL.
2. ALL DIMENSIONS ARE IN INCH.

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