

WS-1200400WG

WR-12 Straight Waveguide, 6 in.

DEVICE OVERVIEW

General Description

WR-12 6" Marki Microwave Straight Waveguides, operating from 60-90 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.



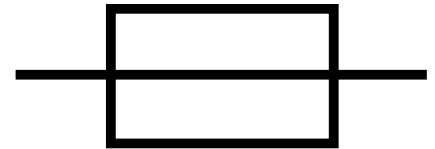
Features

- Copper waveguide
- Brass UG-387/U flanges
- Gold plated
- Very low loss

Applications

- 5G
- Radar
- Communication Systems
- Satellite Communications

Functional Block Diagram



Part Ordering Options

| Part Number | Description | Package | Green Status | Product Lifecycle | Export Classification |
|--------------|---------------------------------|---------|---------------|-------------------|-----------------------|
| WS-1200400WG | WR-12 Straight Waveguide, 6 in. | WR-12 | REACH RoHS | Released | EAR99 |
| WS-1200100WG | WR-12 Straight Waveguide, 1 in. | WR-12 | REACH RoHS | Released | EAR99 |
| WS-1200200WG | WR-12 Straight Waveguide, 2 in. | WR-12 | REACH RoHS | Released | EAR99 |
| WS-1200300WG | WR-12 Straight Waveguide, 3 in. | WR-12 | REACH RoHS | Released | EAR99 |

Table Of Contents

- **Device Overview**
 - General Description
 - Features
 - Applications
 - Functional Block Diagram
- **Port Configuration and Functions**
 - Port Functions
- **Revision History**
- **Specifications**
 - Package Information
 - Electrical Specifications
- **Mechanical Data**
 - Outline Drawing

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 = 6 in. |

Electrical Specifications

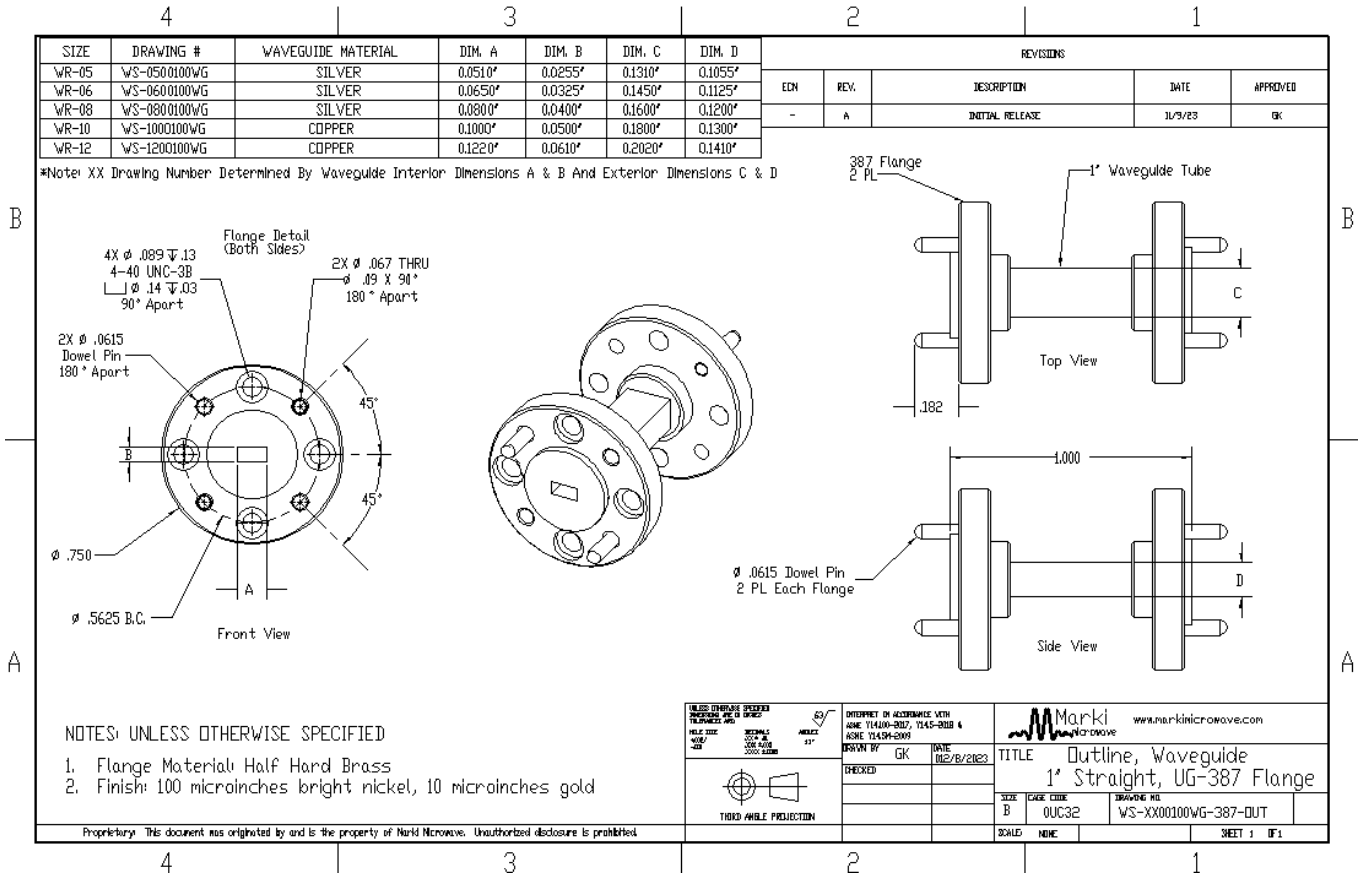
| Parameter | Test Conditions | Minimum Frequency (GHz) | Maximum Frequency (GHz) | Min | Typ | Max | Unit |
|-----------------------------|-----------------|-------------------------|-------------------------|-----|------|-----|------|
| Insertion Loss ¹ | - | 60 | 90 | - | 0.13 | - | dB |
| Return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

^[1] Typical insertion loss per inch.

Mechanical Data

Outline Drawing

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



DISCLAIMER

MARKI MICROWAVE, INC., ("MARKI") PROVIDES TECHNICAL SPECIFICATIONS AND DATA (INCLUDING DATASHEETS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, AND OTHER INFORMATION AND RESOURCES "AS IS" AND WITH ALL FAULTS. MARKI DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT.

These resources are intended for developers skilled in the art designing with Marki products. You are solely responsible for (1) selecting the appropriate products for your application, (2) designing, validating, and testing your application, and (3) ensuring your application meets applicable standards and other requirements. Marki makes no guarantee regarding the suitability of its products for any particular purpose, nor does Marki assume any liability whatsoever arising out of your use or application of any Marki product.

Marki grants you permission to use these resources only for development of an application that uses Marki products. Other reproduction or use of these resources is strictly prohibited. No license is granted to any other Marki intellectual property or to any third-party intellectual property. Marki reserves the right to make changes to the product(s) or information contained herein without notice.

MARKI MICROWAVE and T3 MIXER are trademarks or registered trademarks of Marki Microwave, Inc. All other trademarks used are the property of their respective owners.

© 2024, Marki Microwave, Inc