

Millimeter Wave Band Coaxial Connector

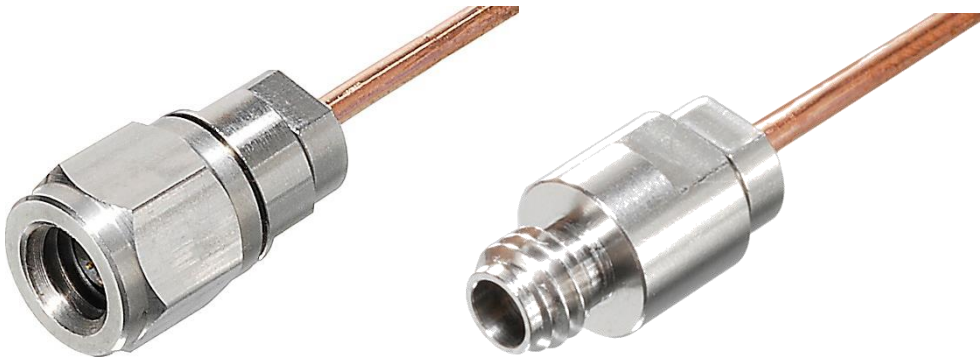
CONNECTOR

1.0mmW Series

MB-0404-1E

Jun.2025

RoHS Compliant



Overview

The 1.0mmW mm-Wave connector supports frequencies up to 110 GHz. We offer a lineup of semi-rigid cable assemblies, conversion adapters, and receptacles.

Application

Measurement and testing, various millimeter wave components and devices, etc.

Features

- Optimized design for superb impedance matching with corresponding high-precision manufacturing for excellent high frequency characteristics
- Non-soldered connection of the central conductor realizes low-reflection cable assemblies
- Full range of conversion adapters with standardized electrical length

General Specifications

Characteristic (nominal) impedance	50Ω
Frequency Range	DC to 110GHz
Applicable Cable	Semi-rigid cable (SX-09) 0.034“ Semi-rigid cable (SX-12) 0.047“ Flexible cable (SWF-12) Armored cable

* This product is made by Waka Manufacturing Co.,Ltd..

Materials and Finishes

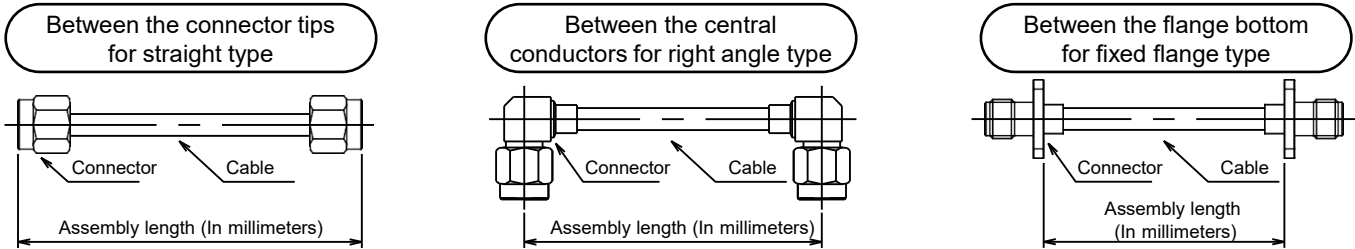
Part Number	Components	Materials / Finishes
02R0267-00	Shell	Plug Side : SUS / Passivate
		Jack Side : Beryllium Copper / Au
	Central Contact	Beryllium Copper / Au
01S1124-00	Shell	Kovar / Au
	Central Contact	Kovar / Au
Other 1.0mmW series	Shell	SUS / Passivate
	Central Contact	Beryllium Copper / Au

Product Name and Product Overview 1/2

Categories	Product Name	Product Overview	VSWR	Insertion Loss
Connector	01R0229-10	1.0mmW Bulkhead Jack	1.3 max.@DC-40GHz 1.5 max.@40GHz-60GHz 2.0 max.@60GHz-110GHz	1.0dB max.@DC-110GHz
	01R0367-00	1.0mmW 4hole Jack Compression	1.4 max.@DC-60GHz 1.6 max.@60GHz-110GHz	1.0dB max.@DC-110GHz
	01S1124-00	1.0mmW Glass Beads	—	0.5dB max. @DC-110GHz
Coaxial Cable Assembly	02W2646#xxxx	1.0mmW/P 1.0mmW/J SWF-12 Assy	1.3 max.@DC-40GHz 1.4 max.@40GHz-60GHz 1.6 max.@60GHz-110GHz	3.3dB max.@DC-110GHz ※L=100mm
	02W2647#xxxx	1.0mmW/P 1.0mmW/P SWF-12 Assy	1.3 max.@DC-40GHz 1.4 max.@40GHz-60GHz 1.6 max.@60GHz-110GHz	3.3dB max.@DC-110GHz ※L=100mm
	02YA656#xxxx	1.0mmW/P 1.0mmW/P SX-12 Assy	1.3 max.@DC-40GHz 1.4 max.@40GHz-60GHz 1.6 max.@60GHz-110GHz	3.3dB max.@DC-110GHz ※L=100mm
	02YA657#xxxx	1.0mmW/J 1.0mmW/J SX-12 Assy	1.3 max.@DC-40GHz 1.4 max.@40GHz-60GHz 1.6 max.@60GHz-110GHz	3.3dB max.@DC-110GHz ※L=100mm
	02YE209#xxxx	1.0mmW/P 0.8mm/P SX-09 Assy	1.2 max.@DC-40GHz 1.4 max.@40GHz-60GHz 1.6 max.@60GHz-110GHz	3.3dB max.@DC-110GHz ※L=100mm
	02YE210#xxxx	1.0mmW/J 0.8mm/P SX-09 Assy		
	02YE211#xxxx	1.0mmW/P 0.8mm/J SX-09 Assy		
	02YE212#xxxx	1.0mmW/J 0.8mm/J SX-09 Assy		
	AM1KWFWF#xxxx	1.0mmW/J 1.0mmW/J Armored Assy	1.3 max.@DC-40GHz 1.4 max.@40GHz-60GHz 1.6 max.@60GHz-110GHz	3.3dB max.@DC-110GHz ※L=100mm
	AM1KWMWF#xxxx	1.0mmW/P 1.0mmW/J Armored Assy		
	AM1KWMWM#xxxx	1.0mmW/P 1.0mmW/P Armored Assy		

*#xxxx represent cable length in millimeters. Ex.: #0100=100mm

Cable Assembly Length Definitions



Product Name and Product Overview 2/2

Categories	Product Name	Product Overview	VSWR	Insertion Loss
Adapter	02R0266-00	1.0mmW/P-1.0mmW/P	1.3 max.@DC-60GHz 1.4 max.@60GHz-110GHz	0.6dB max.@DC-110GHz
	02R0267-00	1.0mmW/P-1.0mmW/J		
	02R0268-00	1.0mmW/J-1.0mmW/J		
	02R0507-00	1.0mmW/P-0.8mm/P	1.4 max.@DC-110GHz 1.5 max.@110GHz-130GHz	0.5dB max.@DC-110GHz 1.2dB max.@110GHz-130GHz
	02R0508-00	1.0mmW/J-0.8mm/P		
	02R0509-00	1.0mmW/P-0.8mm/J		
	02R0510-00	1.0mmW/J-0.8mm/J		
Phaser	02X0657-00	1.0mmW Phase Adapter	1.4 max.@DC-110GHz	1.4dB max.@DC-110GHz

Measured SI Data

02YA656#0100 (1.0mmW/P 1.0mmW/P SX-12 L=100mm)

MS4647B

MODEL: 02YA656#0100

DATE: 11/26/2024 09:17

DEVICE ID:

OPERATOR:

START: 0.100000000 GHz

ERROR CORR: 12-TERM

STOP: 110.000000000 GHz

AVERAGING: 1 PT

STEP: 0.100000000 GHz

IF BNDWIDTH: 1 KHz

PARAMETER: ---TR1---

---TR2---

NORMALIZATION: -S21-

-S11-

SMOOTHING: 0.0 PERCENT

0.0 PERCENT

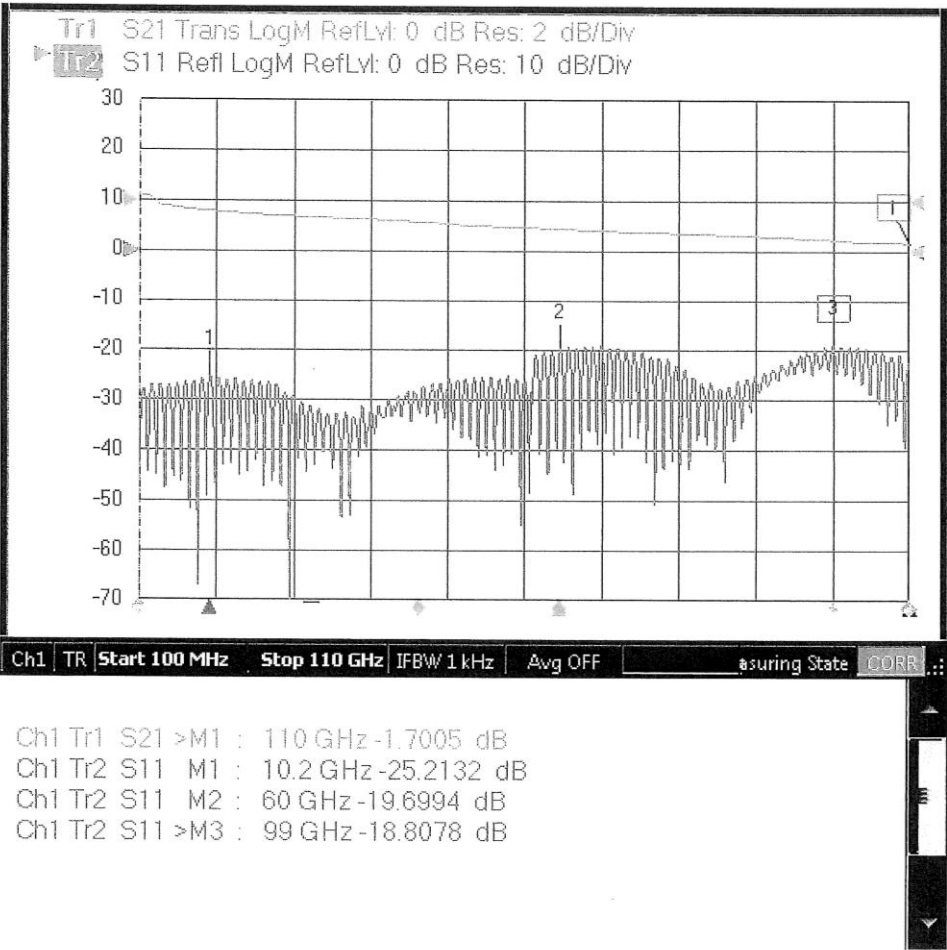
DELAY APERTURE:

REFERENCE PLANE: --PORT1--

--PORT2--

0.0000mm

0.0000mm



DC - 110GHz

Drawings and Specifications

Categories	Product Name	Product Drawing Number	Product Specifications Table
Connector	01R0229-10	SJ131204	JACS-20246
	01R0367-00	SJ131218	JACS-20248
	01S1124-00	SJ131205	JACS-20247
Coaxial Cable Assembly	02W2646#xxxx	SJ131220	JACS-20255
	02W2647#xxxx	SJ131221	
	02YA656#xxxx	SJ131222	JACS-20254
	02YA657#xxxx	SJ131223	
	02YE209#xxxx	SJ131227	JACS-20258
	02YE210#xxxx	SJ131228	
	02YE211#xxxx	SJ131229	
	02YE212#xxxx	SJ131230	
	AM1KWFWF#xxxx	SJ131234	JACS-20256
	AM1KWMWF#xxxx	SJ131235	
	AM1KWMWM#xxxx	SJ131236	
Adapter	02R0266-00	SJ131207	JACS-20253
	02R0267-00	SJ131208	
	02R0268-00	SJ131209	
	02R0507-00	SJ131210	JACS-20251
	02R0508-00	SJ131212	
	02R0509-00	SJ131213	
	02R0510-00	SJ131219	
Phaser	02X0657-00	SJ131217	JACS-20252

Notice:

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For purchase, a product specification must be agreed upon.
2. Users are requested to provide protection circuits and redundancy circuits to ensure safety of the equipment, and sufficiently review the suitability of JAE's products to the equipment.
3. The products presented in this brochure are designed for the uses recommended below.
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(i) Please contact us if you are considering use involving a quality assurance program that you specify or that is peculiar to the industry, such as:
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(ii) We may separately give you our support with a quality assurance program that you specify, when you think of a use such as :
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- (2) Recommended applications include:
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