

UWB Antenna

Type: WXA-S1FL

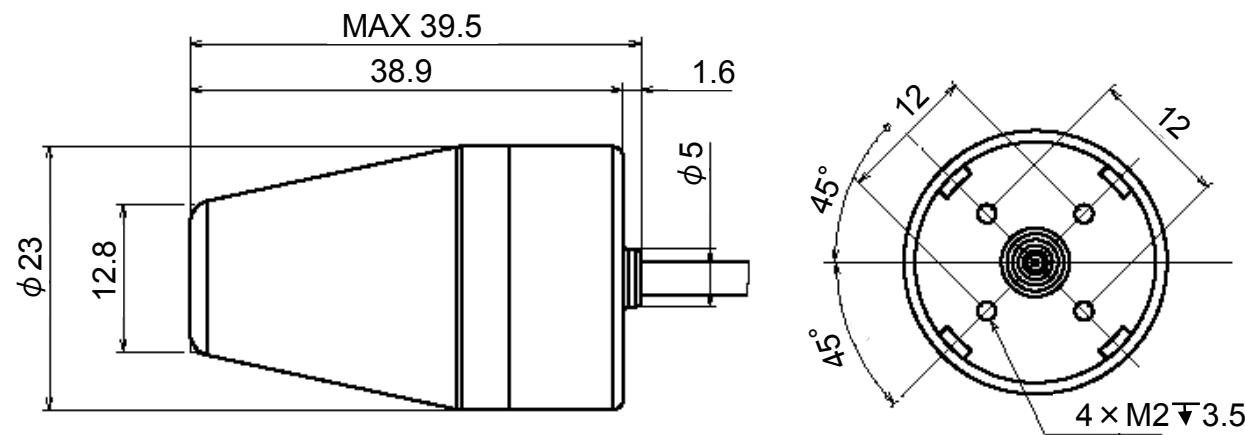
Technical Data & Application Note Ver.1

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1. Dimension

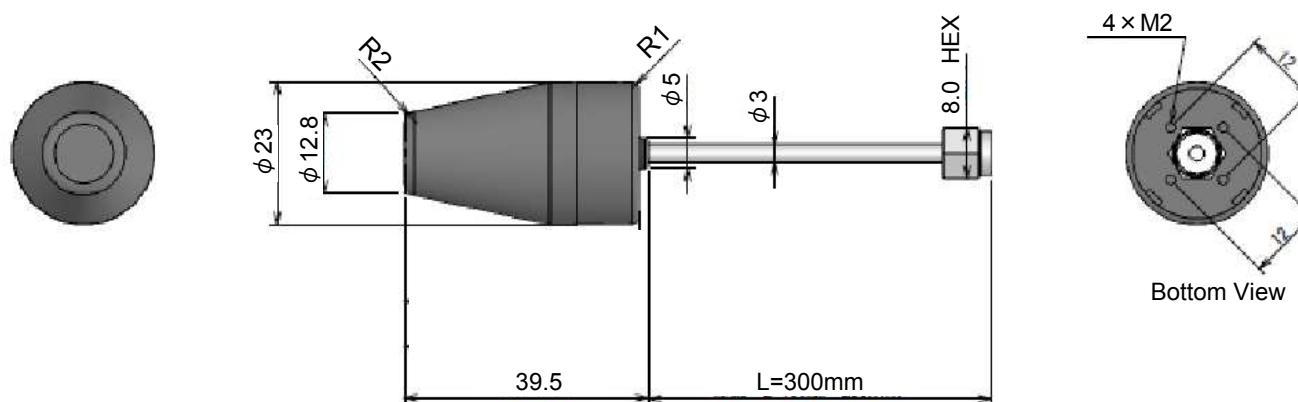
▪ Dimension (in mm)

Antenna



Bottom View

Antenna with Semi-Flexible Cable and SMA/P Connector

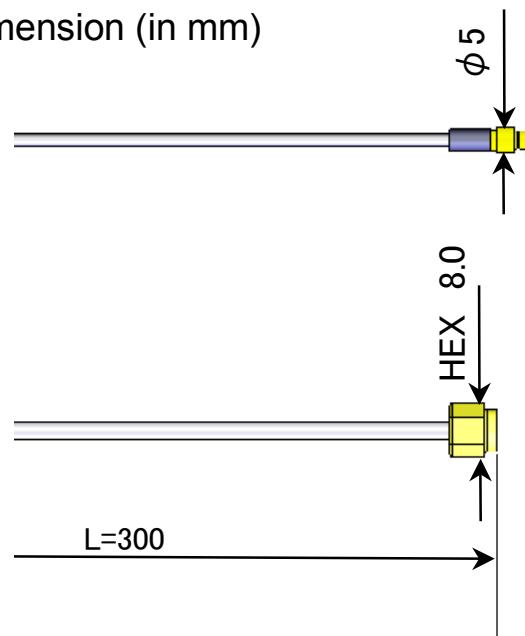
NOTE. TOLERANCE ± 0.3 mm

2. Power feeding to Antenna

• Cable and Connector Options

Item	Value
Connector type	SMA/P or MMCX/P
Cable_Length	300mm (Option :100mm ~ 500mm)
Cable_type	Semi-Flexible Cable (Option : Flexible Cable)
Input impedance	50 Ω

• Dimension (in mm)

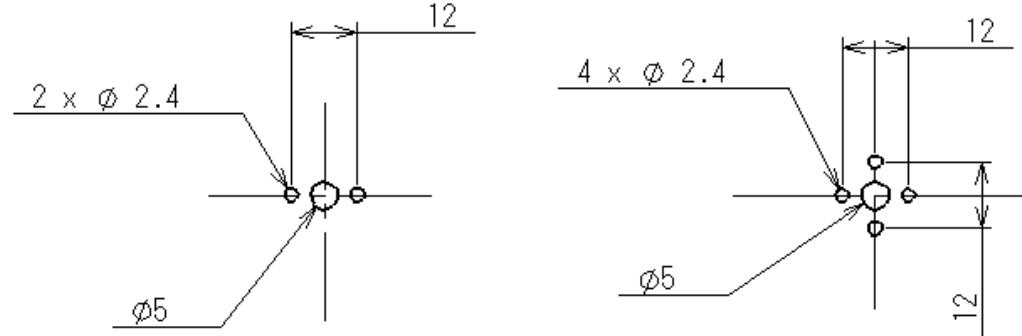


Connect the best suited connector.

3. Mounting on Plate(or Box)

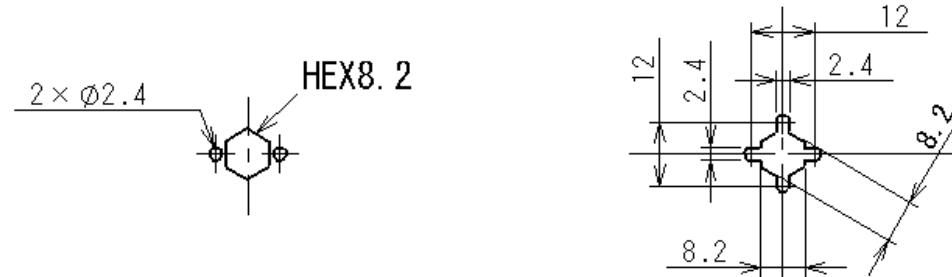
- Dimension of holes on plate (in mm)

Example Case 1. Antenna with MMCX/P connector



NOTE. TOLERANCE ± 0.1 mm

Case 2. Antenna with SMA/P connector



NOTE. TOLERANCE ± 0.1 mm

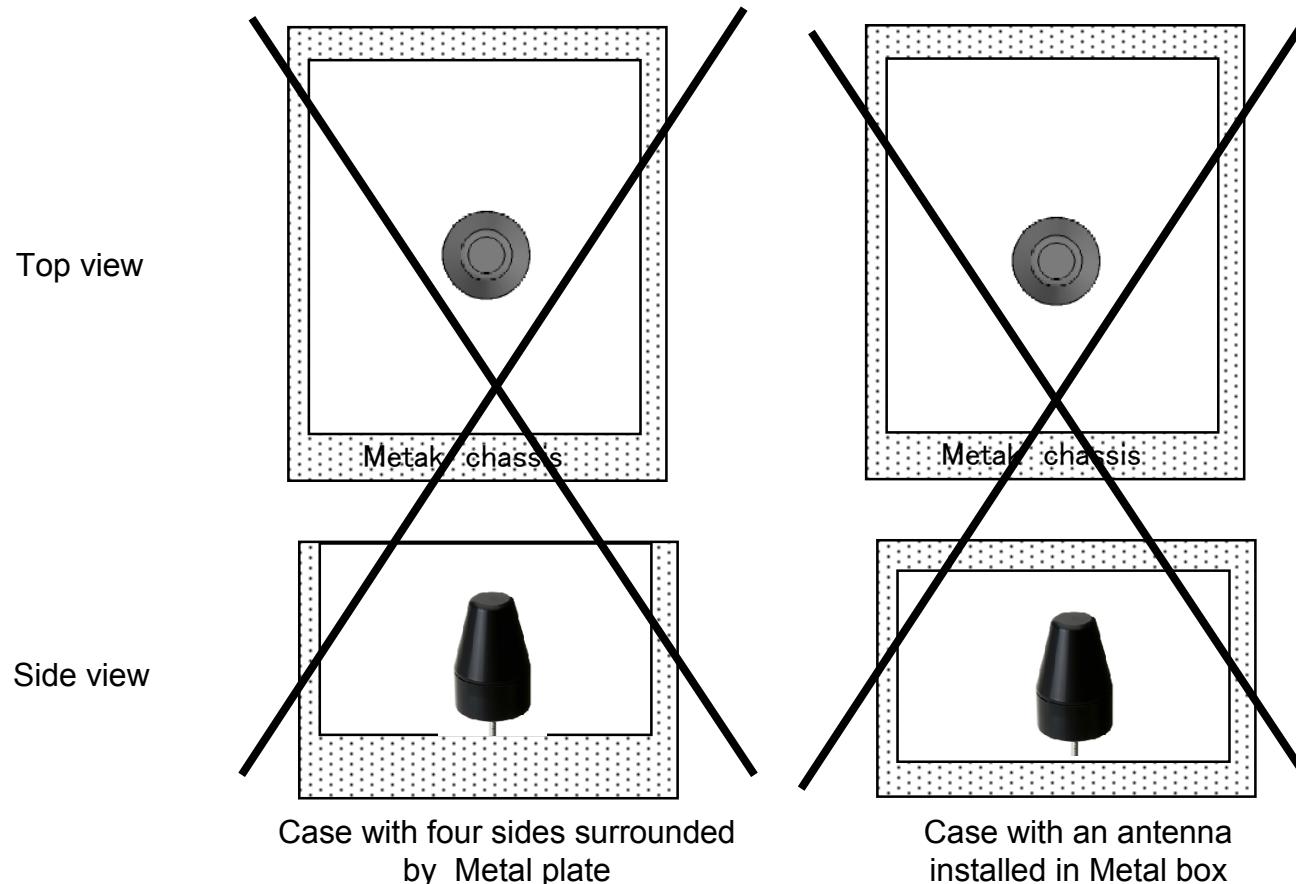
4. Conditions of ANTENNA Placement

- Conditions

Notes:

Don't place an antenna inside a metal chassis as shown below as antenna performance will deteriorate.

Please contact us Omron representative for additional help in placing Antenna.



5. VSWR Measured Data

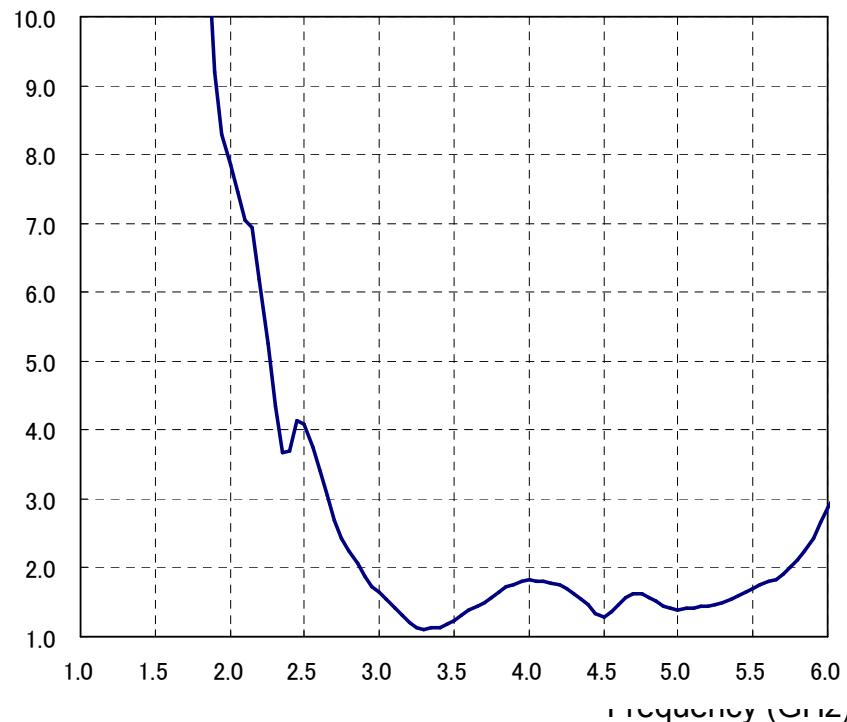
• Electrical Characteristics

Item	Value
Range of frequency (GHz)	3.1 to 4.9
VSWR	3.0 (Max)
Input impedance (Ω)	50

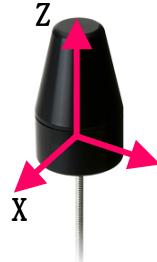
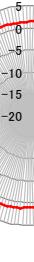
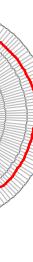
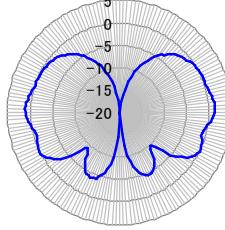
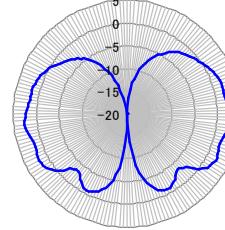
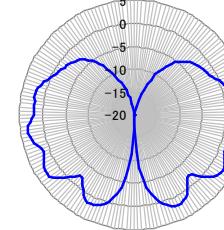
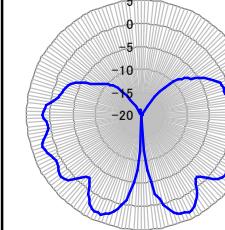
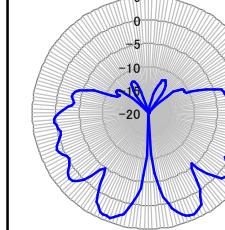
• Radiation Characteristics

Item	Value
Range of frequency (GHz)	3.1 to 4.9
Gain(dBi)	0.0 (Max)
Polarization	Linear
	Vertical - 360° omni-directional
Gain Flatness	3dB

• VSWR



6. Radiation pattern Measured Data

Radiation Pattern	3.0GHz	3.5GHz	4.0GHz	4.5GHz	5.0GHz
<u>XY Plane</u> 	Gain [dBi] 	Gain [dBi] 	Gain [dBi] 	Gain [dBi] 	Gain [dBi] 
<u>ZX Plane</u> 	Gain [dBi] 	Gain [dBi] 	Gain [dBi] 	Gain [dBi] 	Gain [dBi] 
 Vertical  Horizontal					