JTW2G50AN8010A400R

Multilayer Chip Antenna

For 2.5GHz Wireless Communication

Features

※Monolithic SMD with small, low-profile and light-weight type.

※Wide bandwidth

※RoHS compliant

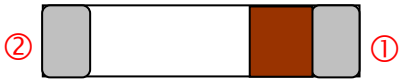
Applications

※2.4GHz WALA,Home RF System,Bluerooth,Modules,etc

Specifications

Center frequency	2.5GHz
Bandwidth	400MHz(typ.)
Peak gain	2.5dBi(typ.) (XZ-V)
Average Gain	0.5dBi(typ.) (XZ-V)
VSWR	2(max)
Impedance	50Ω
Power Capacity	2W(max)
Operation temperature	-40 ~ +85 °C
Storage temperature	-40 ~ +85 °C

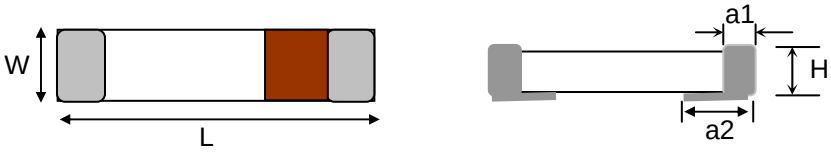
Terminal Configuration



Pin No.	1	2
Pin assignment	Feeding Point	NC

Dimensions and Recommended PC Board Pattern

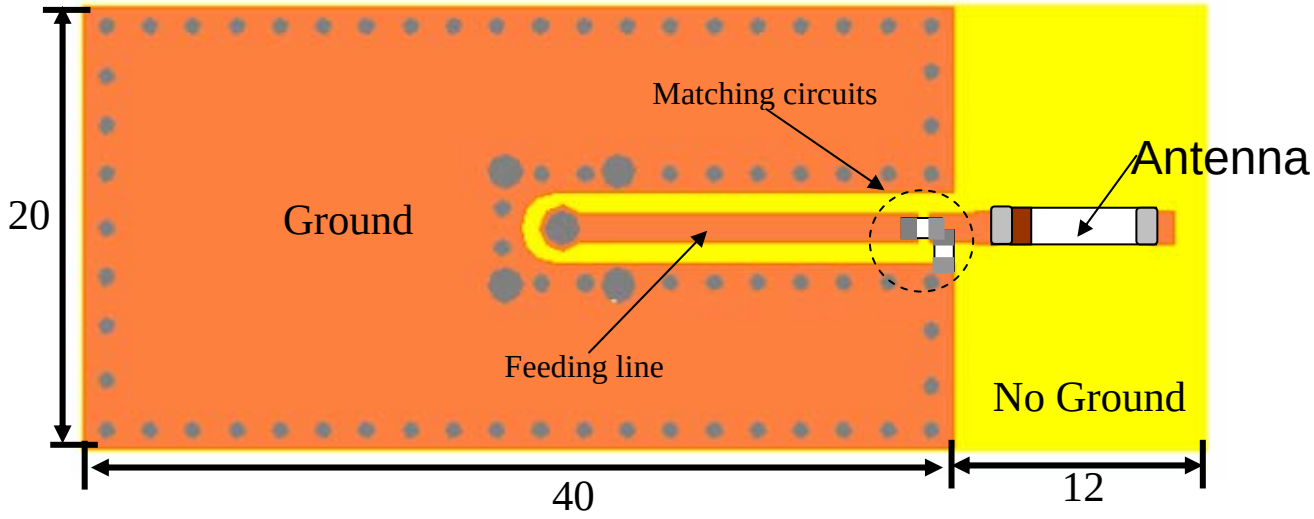
Unit : mm



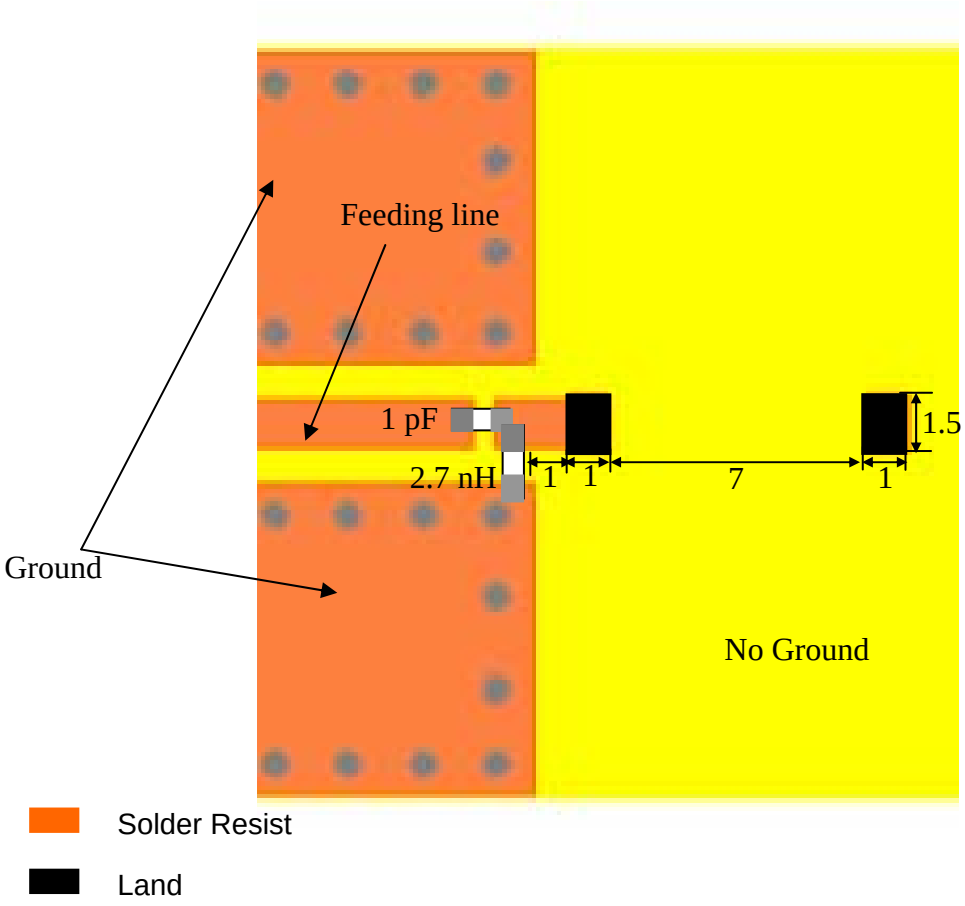
Symbol	L	W	H	a1	a2
Dimensions(mm)	8.0 ± 0.2	1.0 ± 0.2	1.0 ± 0.2	0.5 ± 0.2	1.0 ± 0.2

Typical Electrical Characteristics (T=25oC)

※Test Board



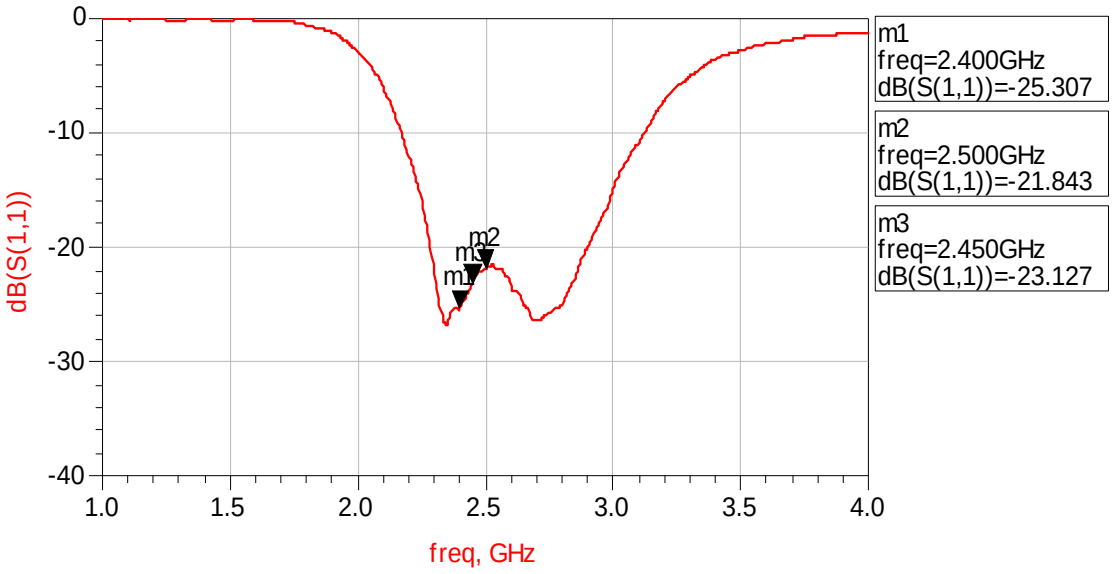
※With Matching Circuits (Unit in mm)



(Matching circuit and component values will be different, depending on PCB layout)

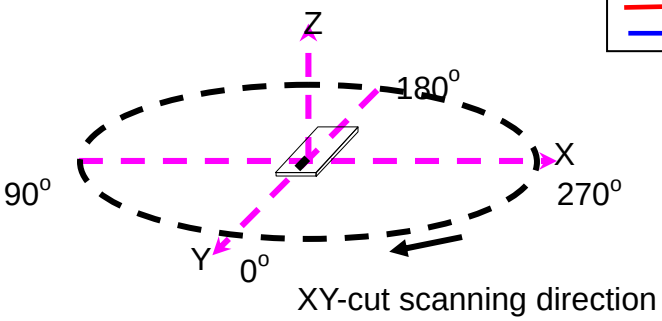
*Line width should be designed to match 50Ω characteristic im pedance ,de pendin gon PCB material and thickness.

※Return Loss/with matching Circuits

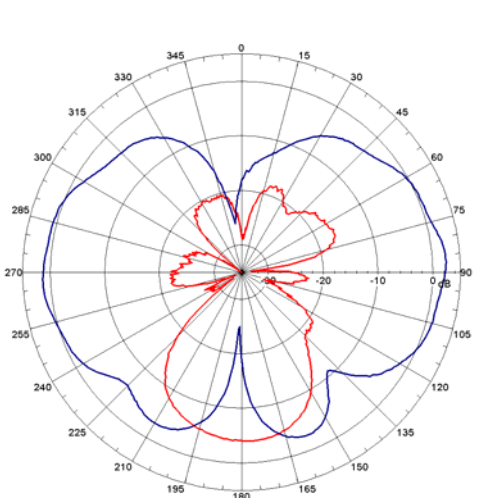


※Radiation Patterns

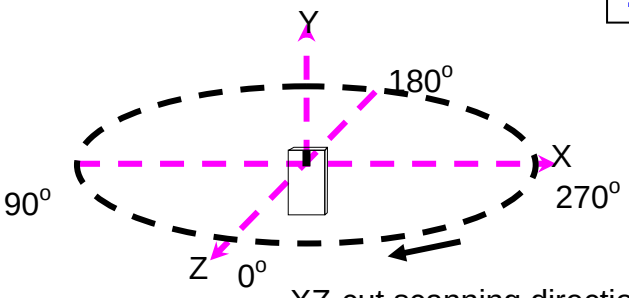
XY-V/XY-H



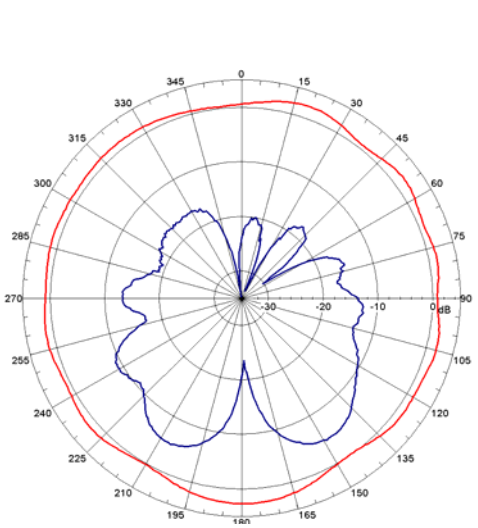
XY-cut scanning direction



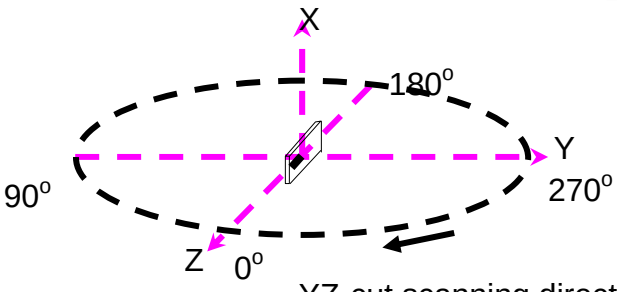
XZ-V/XZ-H



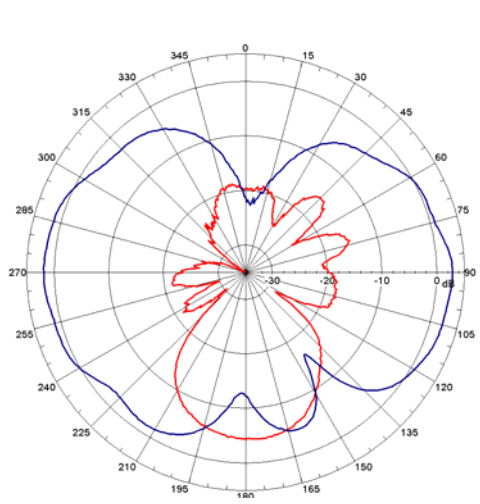
XZ-cut scanning direction



YZ-V/YZ-H



YZ-cut scanning direction



Reminders for users of JTW ceramic chip antennas

1. This chip antenna is made of ceramic materials which are relatively more rigid and brittle compared to printed circuit board materials. Bending of circuit board at the locations where chip antenna is mounted may cause the cracking of solder joints or antenna itself.

2. Punching/cutting of the break-off tab of PCB panel may cause severe bending of the circuit board which may result in cracking of solder joints or chip antenna itself. Therefore break-off tab shall be located away from the installation site of chip antenna.

3. Be cautious when ultrasonic welding process needs to be used near the locations where chip antennas are installed. Strong ultrasonic vibration may cause the cracking of chip antenna solder joints.
   Presented data were measured on reference PCB (ground) as shown in this specification. When the antenna placement or size of the PCB is changed, antenna performance and values of matching components may differ from data shown here.

4. Information presented in this Reference Specification is believed to be correct as of the date of publishing. JointWel Technologies Corporation reserves the rights to change the Reference Specification without notice due to technical improvements, etc. Please consult with JointWel's engineering team about the latest information before using this product. Per request, we may provide advice and assistance in implementing this antenna to a customer's device by simulation or real measurement of the interested device in our testing facilities.