

ISM Ceramic Chip Antenna 5030 915MHz AEC-Q200

AT503008915M

MERITEK

FEATURE

- Linear Polarization
- Stable and Reliable in Performances
- Reflow Process Compatible
- Application: ISM 915MHz Band Application, IoT Applications
- AEC-Q200 Compliant



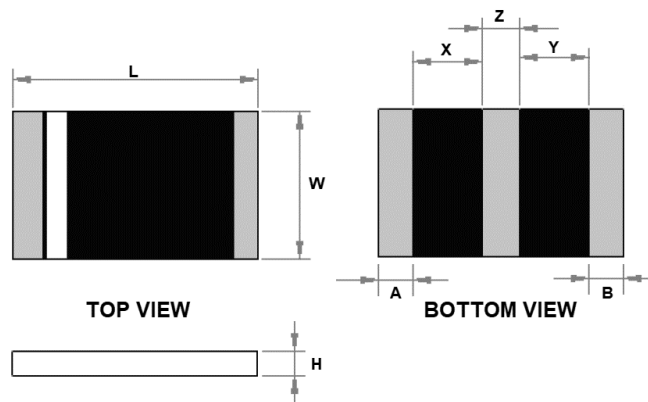
ELECTRICAL CHARACTERISTICS

Item	Characteristic
Center Frequency	915MHz
Frequency Band	902~928 MHz
Voltage Standing Wave Ratio (VSWR)	2.0 Max.
Ground Plane Dimensions	80x40mm
Polarization	Linear
Impedance	50Ω (Typical)
Peak Gain	0.8 dBi (Typical)
Efficiency	52% (Typical)
Operating Temperature	-40°C~+85°

Note:

1. Center Frequency means the frequency with the lowest value in return loss of the chip antenna on the evaluation board.
2. A Typical Value is for reference only, could be changed due to the system or equipment of measurement is different.

DIMENSION



Size Code	L ±0.15	W ±0.15	H ±0.15	A	B	X	Y	Z
5030	5.00	3.00	0.5	0.7	0.7	1.425	1.425	0.75

Unit: mm

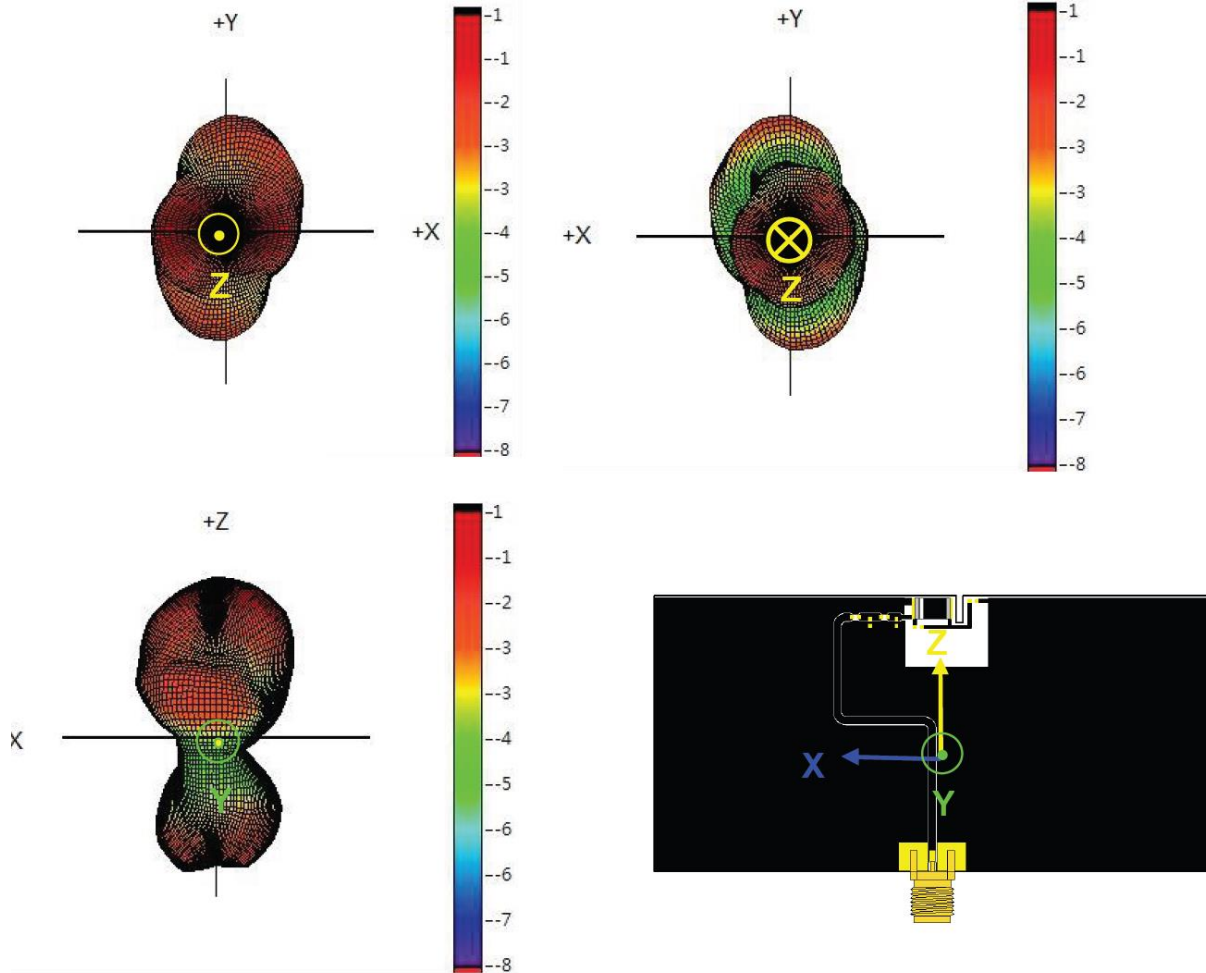
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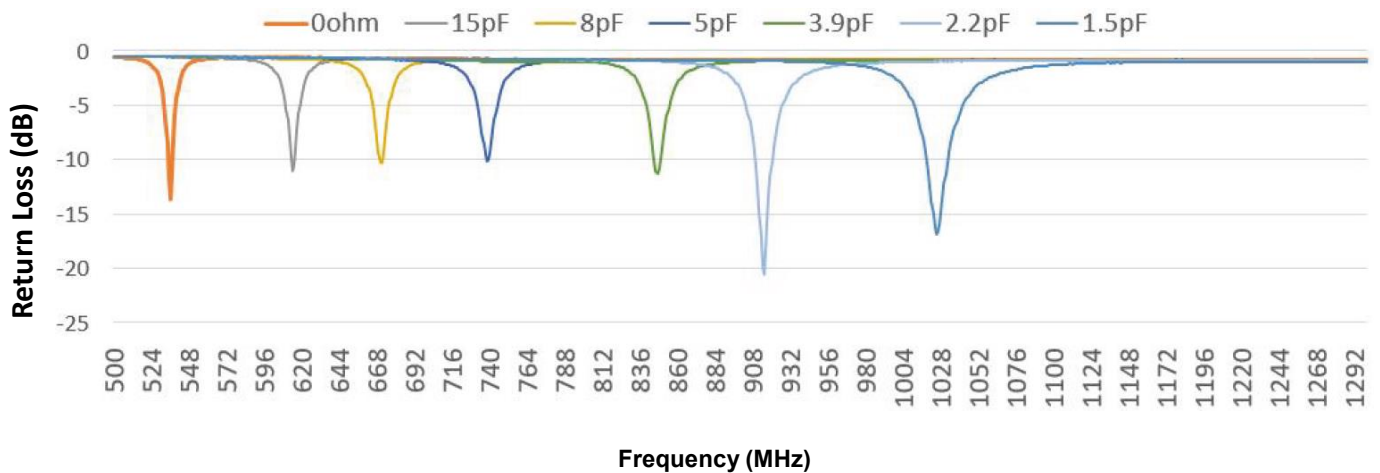
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ELECTRICAL PERFORMANCE

Gain Pattern



Return Loss

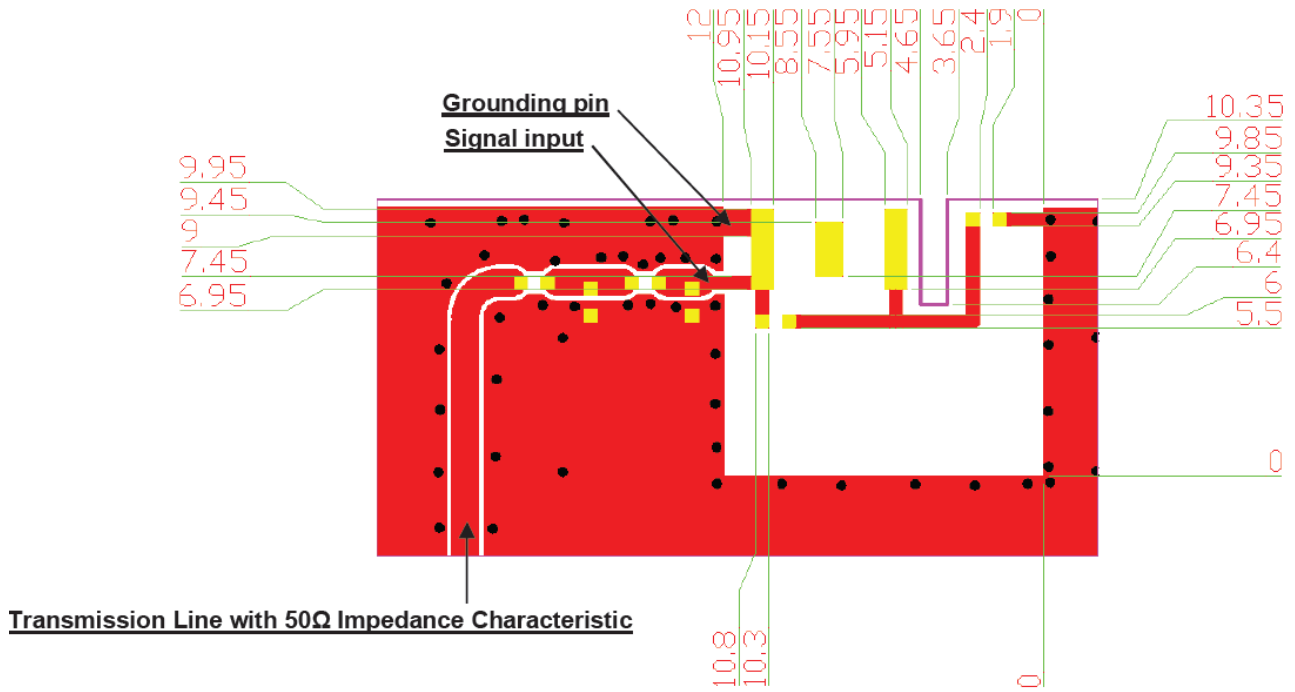


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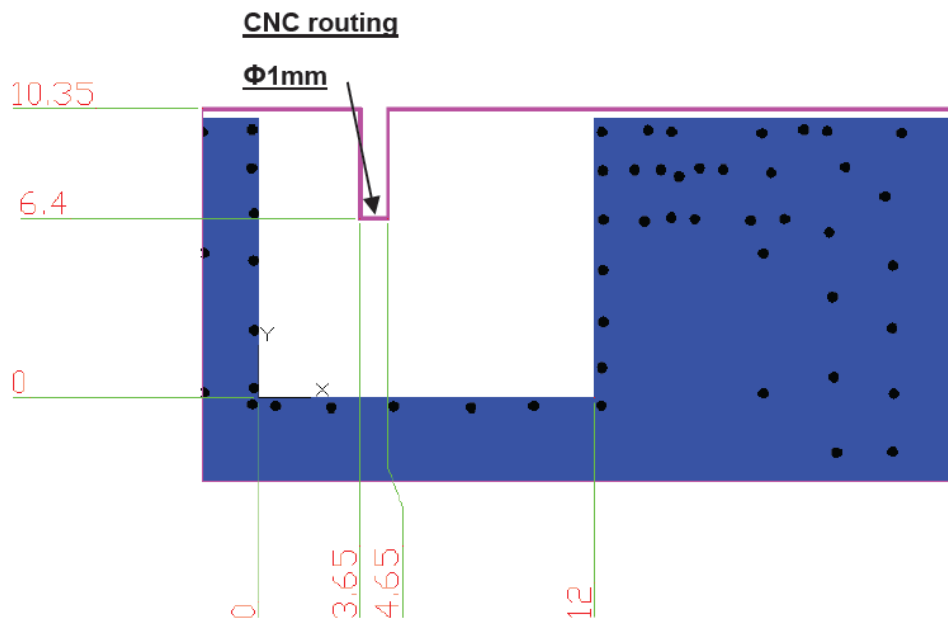
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RECOMMENDED PCB LAYOUT



Top View



Bottom View

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PART NUMBERING SYSTEM

AT **5030** **08** **915M**
(1) (2) (3) (4)

No	Item	Code	Description	
(1)	Product Code	AT	SMD Ceramic Chip Antenna type	
(2)	Size Code	5030	5030: 5.0x3.0mm	Length X Width mm
(3)	Peak Gain	08	08: 0.8dBi	
(4)	Center Frequency	915M	915M: 915MHz	M: MHz, G:GHz

RECOMMENDED SOLDERING PROFILES

Reflow Condition		
Pre Heat	Temp. Min $T_{s(min)}$	140°C
	Temp. Max $T_{s(max)}$	160°C
	Time (min. to max.) (t_s)	60 ~120 seconds
Reflow	Temp. (T_L)	200°C
	Time (min. to max.) (t_L)	20 ~40 seconds
Peak Temperature (T_P)		260°C
Time within 5°C of actual peak Temperature (t_p)		10 seconds max.

