ACX
Advanced Ceramic X

AT3216 Series
Multilayer Chip Antenna

Features
❖ Monolithic SMD with small, low-profile and light-weight type.
❖ Wide bandwidth

Applications
❖Bluetooth/Wireless LAN/Home RF
❖ISM band 2.4GHz applications

Specifications

Part Number	Frequency Range (MHz)	Peak Gain (XZ-V)	Average Gain (XZ-V)	VSWR	Impedance
AT3216 -B2R7HAA_	2400 ~ 2500	0.5 dBi typ.	-0.5 dBi typ.	2 max.	50 Ω

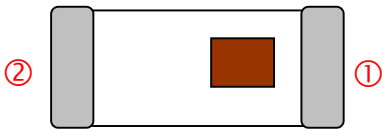
Q'ty/Reel (pcs) : 1000pcs
Operating Temperature Range : -40 ~ +85 °C
Storage Temperature Range : -40 ~ +85 °C
Power Capacity : 3W max.

Part Number

AT	3216	-	B	2R7	HAA	□
①	②		③	④	⑤	⑥

① Type	AT : Antenna	② Dimensions (L × W)	3.2× 1.6 mm
③ Material Code	B	④ Frequency Range	2R7=2700MHz
⑤ Specification Code	HAA	⑥ Packaging	T: Tape & Reel B: Bulk

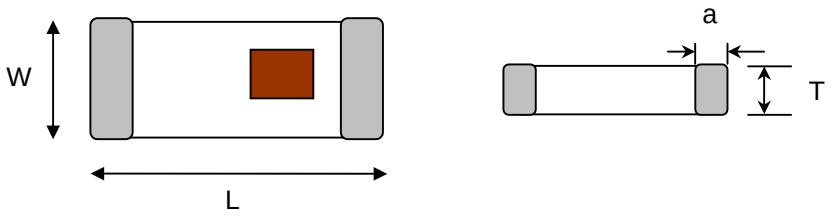
Terminal Configuration



No.	Terminal Name	No.	Terminal Name
①	Feeding Point	②	NC

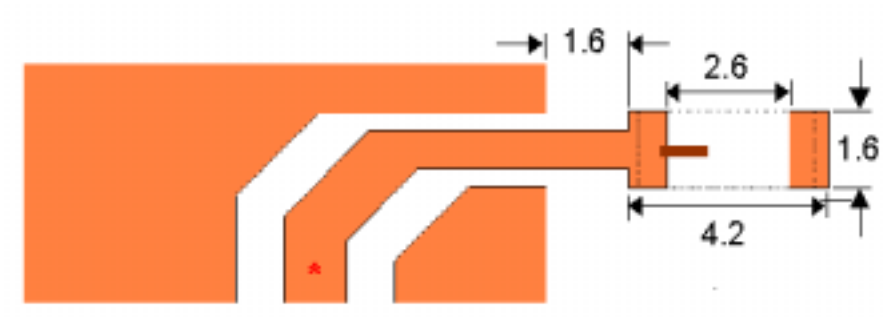
Dimensions and Recommended PC Board Pattern

Unit : mm

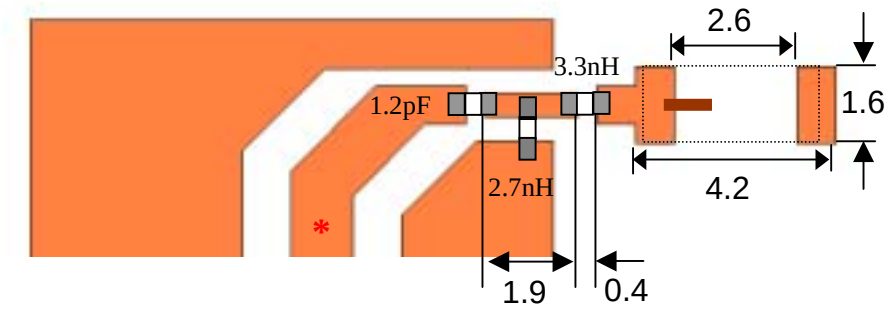


Mark	L	W	T	a
Dimensions	3.2 ±0.2	1.6 ±0.2	1.3+ 0.1/-0.2	0.5 ±0.3

(a) Without Matching Circuits



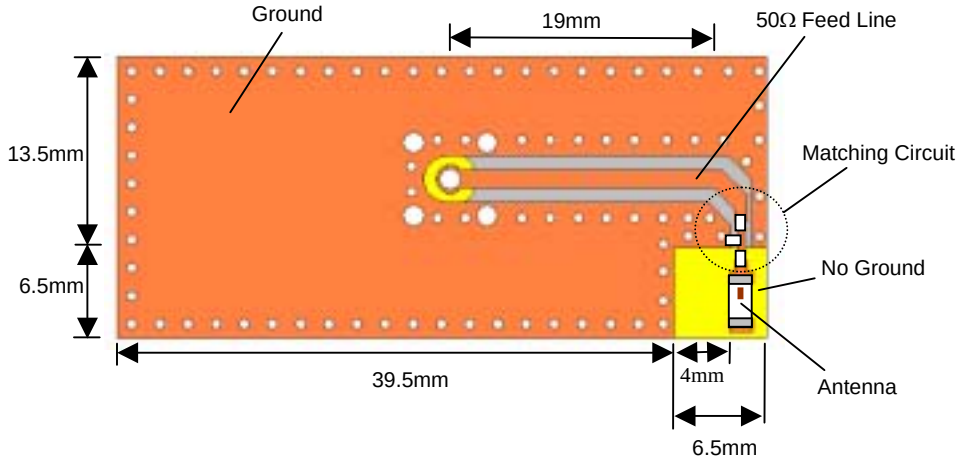
(b) With Matching Circuits



*Line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.

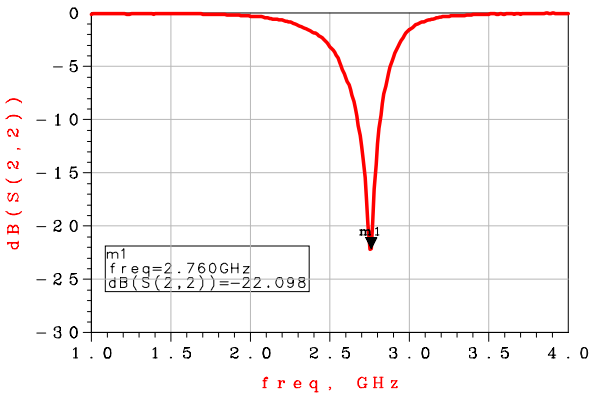
Typical Electrical Characteristics (T=25°C)

❖Test Board

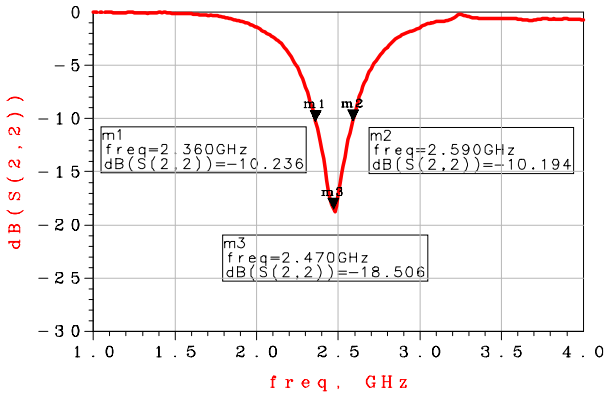


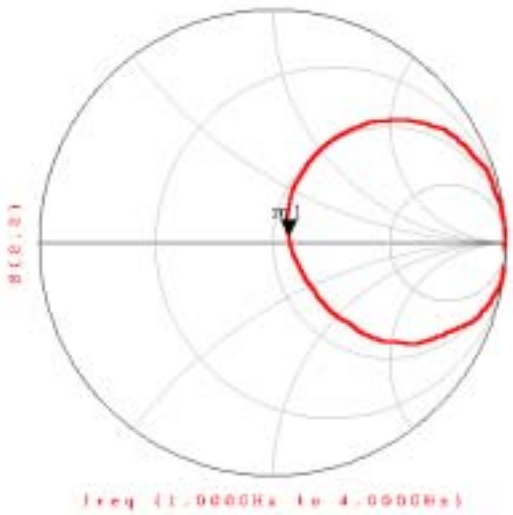
❖Return Loss

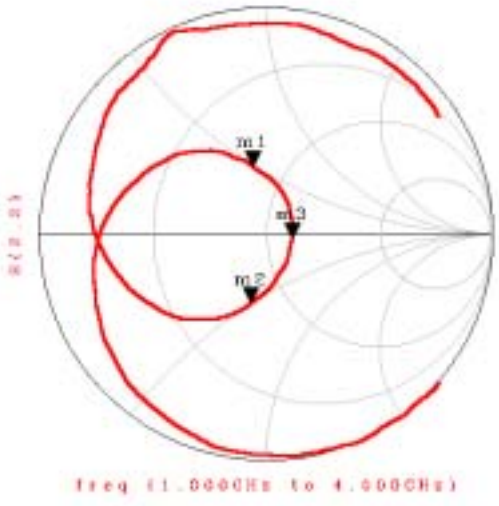
(a) Without Matching Circuits



(b) With Matching Circuits

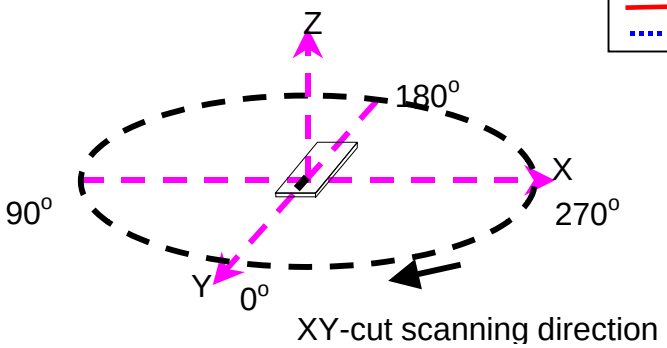


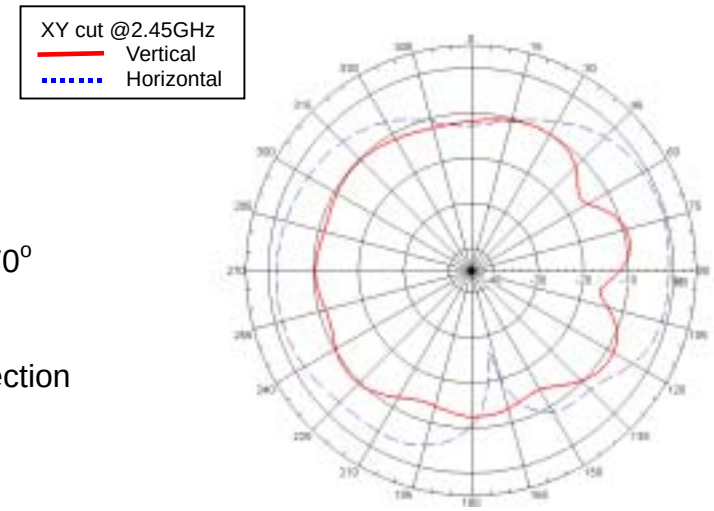




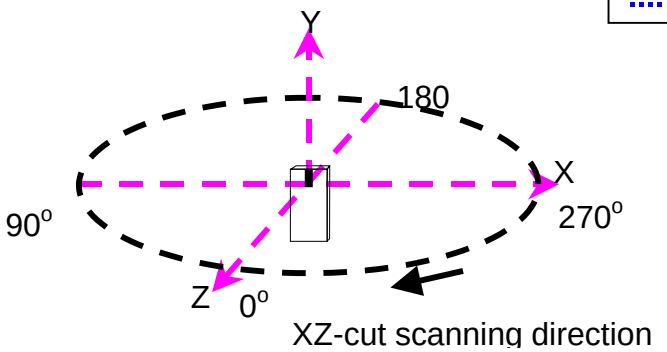
Radiation Patterns

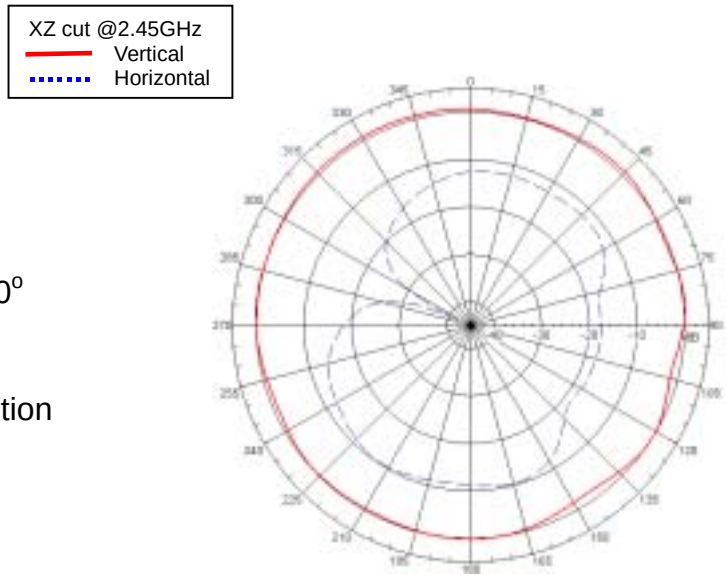
XY-V/XY-H



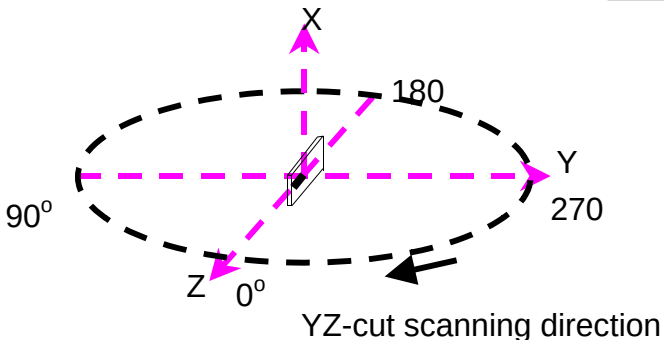


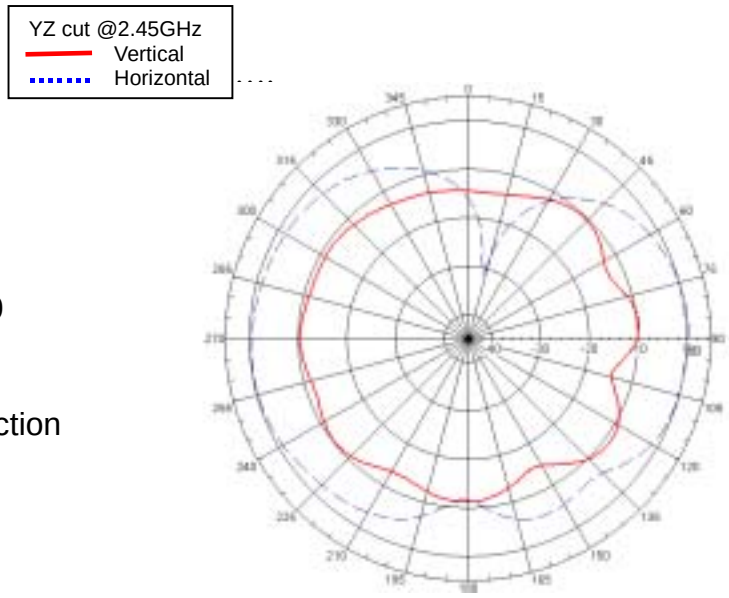
XZ-V/XZ-H





YZ-V/YZ-H





Advanced Ceramic X Corp.
16 Tzu Chiang Road, Hsinchu Industrial District Hsinchu Hsien 303, Taiwan
TEL:886-3-5987008 FAX:886-3-5987001
E-mail: acx@acxc.com.tw http://www.acxc.com.tw