

AT3216 Series (Preliminary)

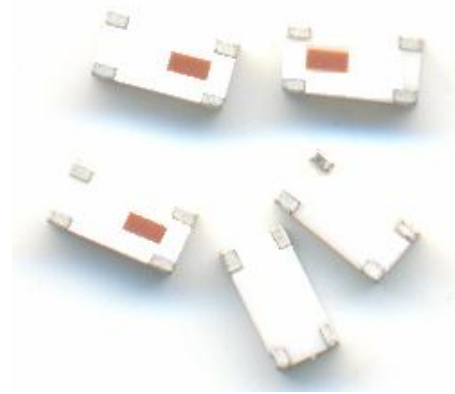
Multilayer Chip Antenna

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-total)	Average Gain (XZ-total)	VSWR	Impedance
AT3216 -T2R4PAA_	2400 ~ 2500	1.5 dBi typ.	-1.0 dBi typ.	3.0 max.	50 Ω

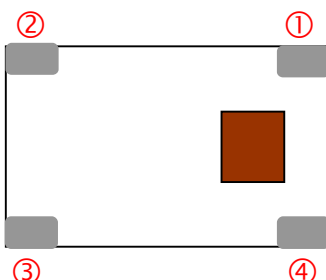
Q'ty/Reel (pcs) : 3,000pcs
 Operating Temperature Range : -40 ~ +85 °C
 Storage Temperature Range : +5 ~ +35 °C, Humidity 45~75%RH
 Storage Period : 12 months max.
 Power Capacity : 2W max.

Part Number

AT 3216 - T 2R4 PAA □ □
 ① ② ③ ④ ⑤ ⑥ ⑦

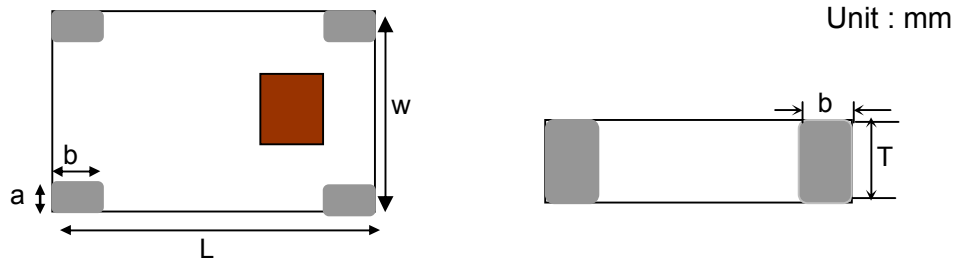
① Type	AT : Antenna	② Dimensions (L × W)	3.2× 1.6 mm
③ Material Code	T	④ Frequency Range	2R4=2400MHz
⑤ Specification Code	PAA	⑥ Packaging	T: Tape & Reel B: Bulk
⑦ Soldering	=lead-containing /LF=lead-free		

Terminal Configuration



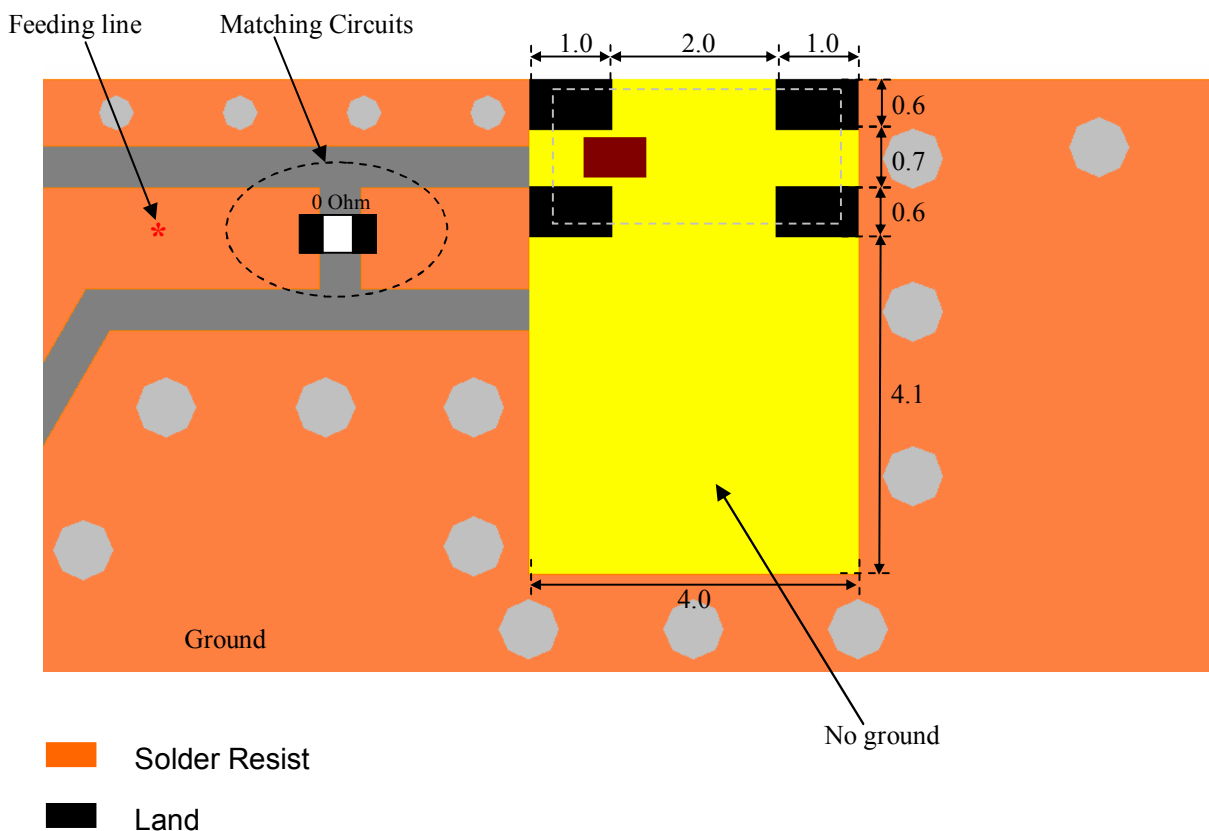
No.	Terminal Name	No.	Terminal Name
①	Feeding Point	②	GND
③	GND	④	GND

Dimensions and Recommended PC Board Pattern



Mark	L	W	T	a	b
Dimensions	3.2±0.2	1.6±0.2	1.2±0.2	0.3+0.1 /-0.2	0.5±0.2

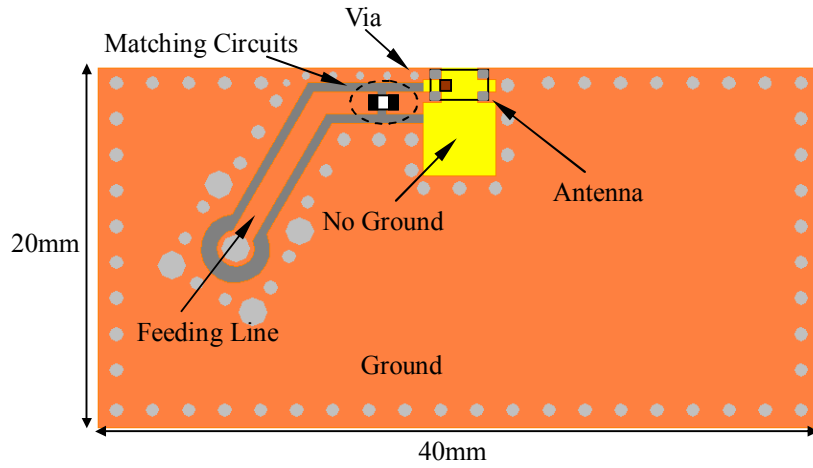
❖ Without Matching Circuits - Unit in mm



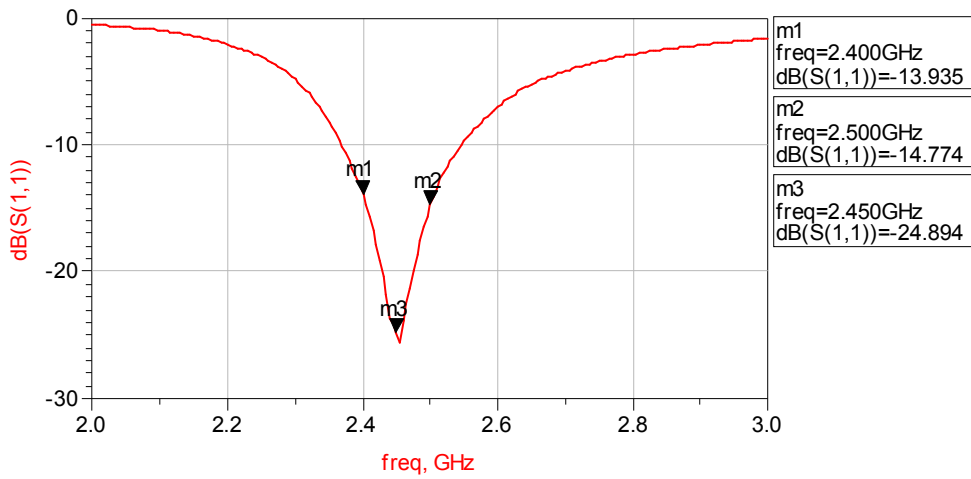
*Line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.

Typical Electrical Characteristics (T=25°C)

❖ Test Board

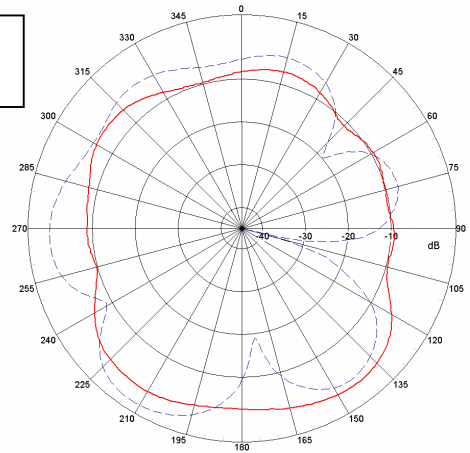
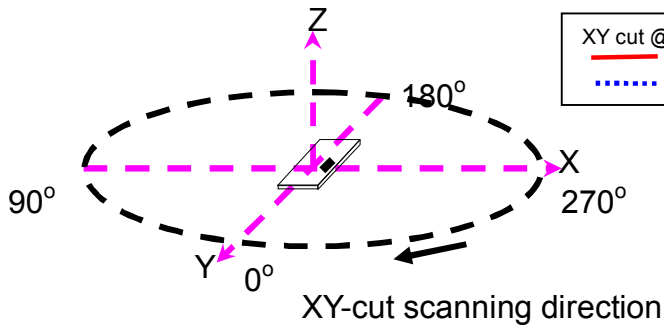


❖ Return Loss-without matching circuits

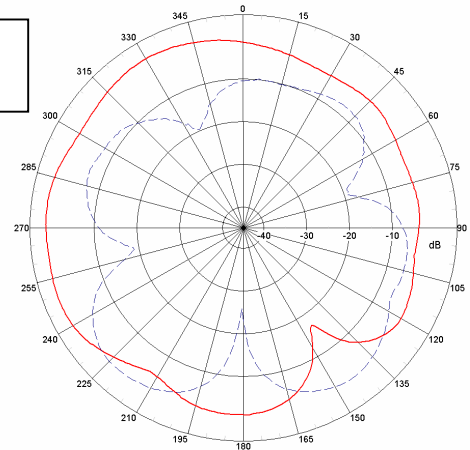
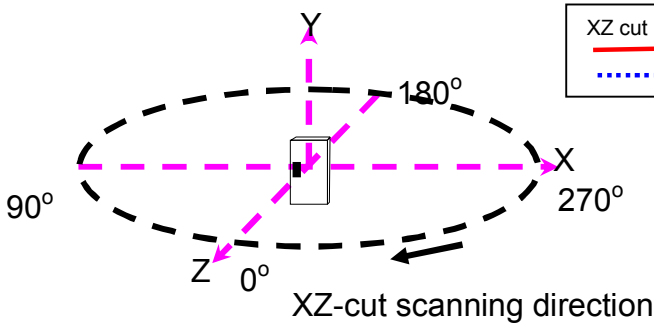


❖ Radiation Patterns

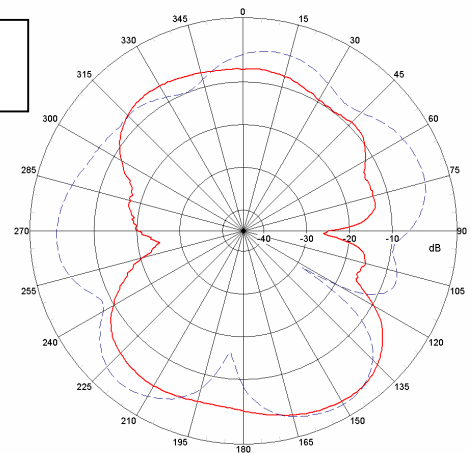
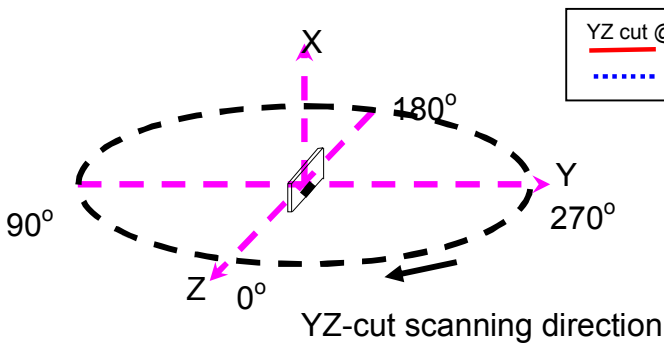
XY-V/XY-H



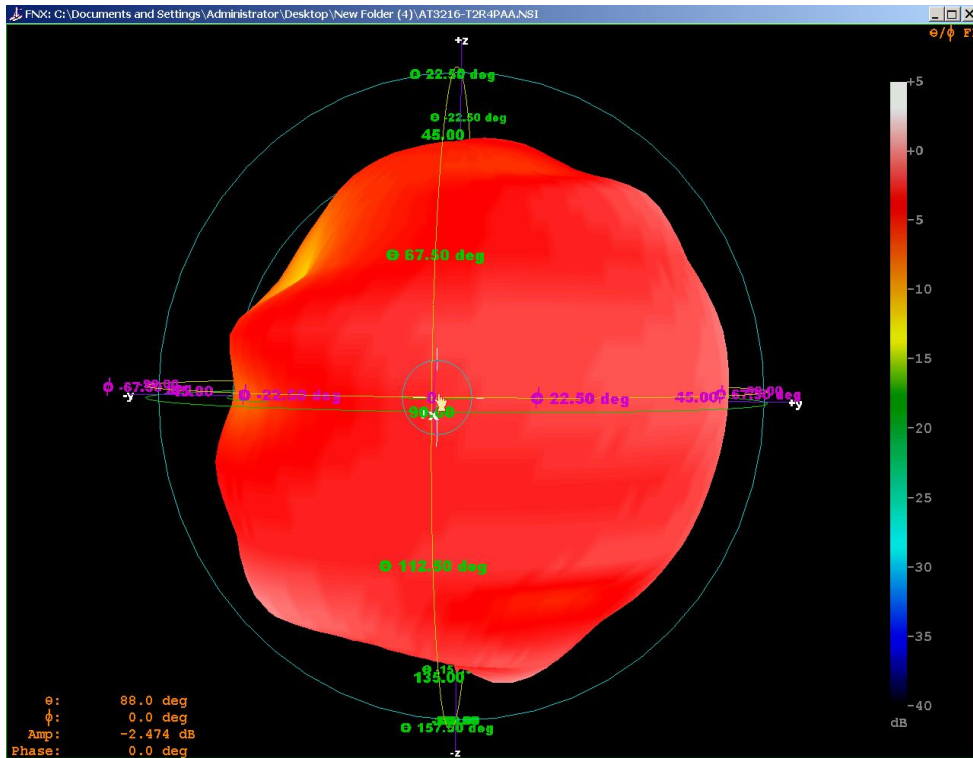
XZ-V/XZ-H



YZ-V/YZ-H



❖ Radiation Patterns - 3D Pattern



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