

2.4GHz 3216 Chip Antenna: ANT3216R2400A1M1

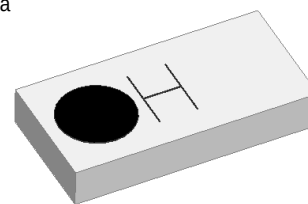
Applications:

WLAN, 802.11b/g, Bluetooth, etc...

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Province, P.R.China

Features

SMD, high reliability, ultra compact, Omni-directional...



Part number

ANT 3216 R 2400 A1 M1
(1) (2) (3) (4) (5) (6)

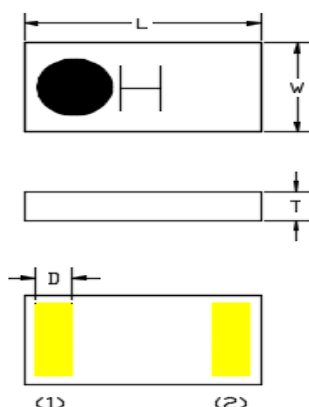
(1) Product Code	Chip
(2) Size Code	3.2x1.6mm
(3) Packing	Tape and reel
(4) Frequency	2.4GHz
(5) Series	A1
(6) Type	M1

Electrical Specification

Working Frequency Range	2400 ~2484 MHz
Peak Gain	0.5 dBi (Typ.)
Impedance	50 Ohm
VSWR	2.5 (Max)
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Operation Temperature(°C)	-40~85°C

The specification is defined on EVB.

Dimension and Terminal Configuration



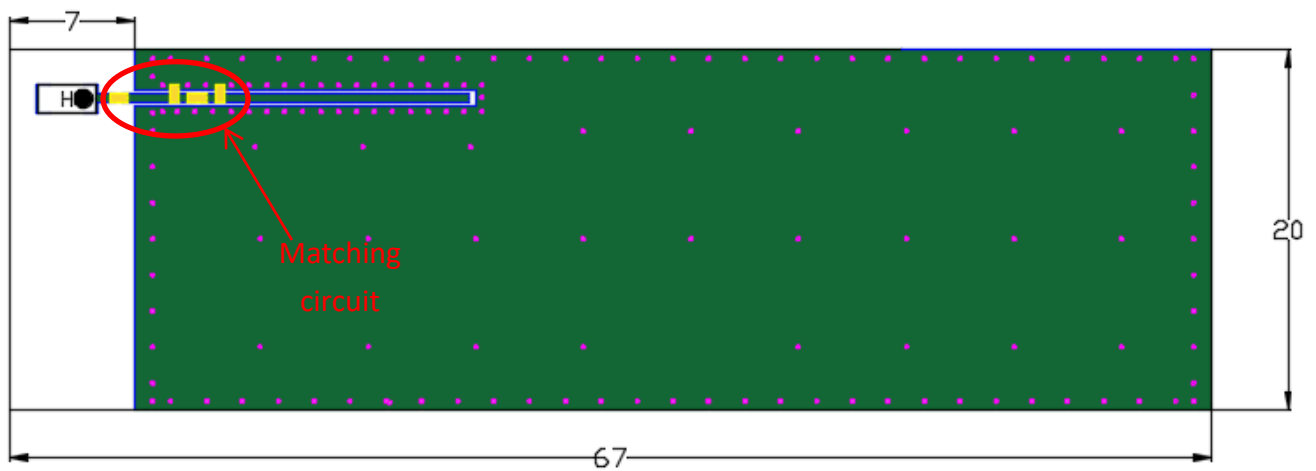
Dimension (mm)	
L	3.20 ± 0.15
W	1.60 ± 0.15
T	0.55 ± 0.10
D	0.50 ± 0.15

No.	Terminal Name
1	Feeding
2	Soldering

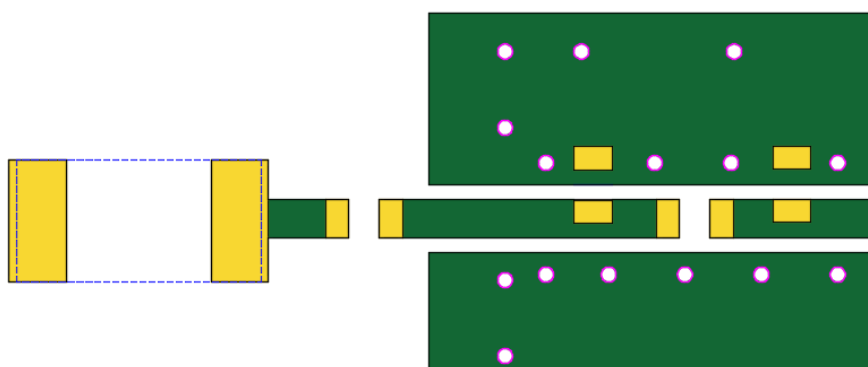
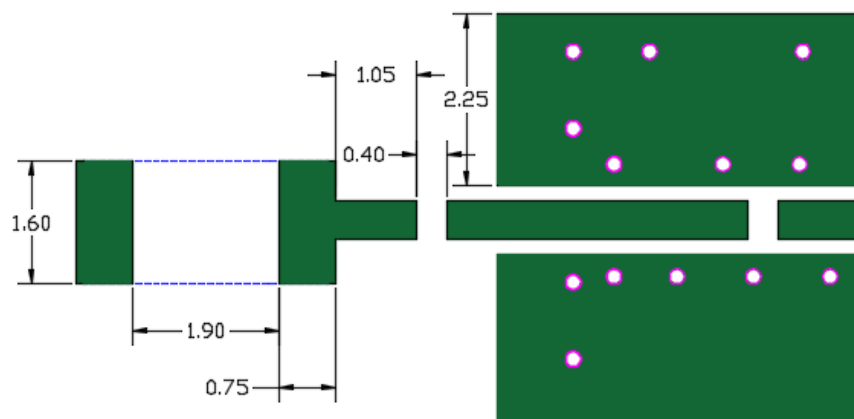
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Evaluation Board Reference

PCB Dimension



Antenna Layout Reference



Unit : mm

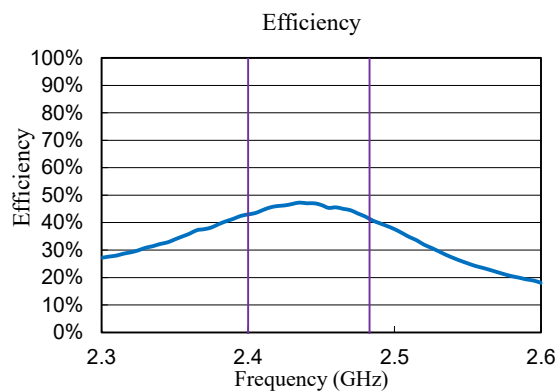
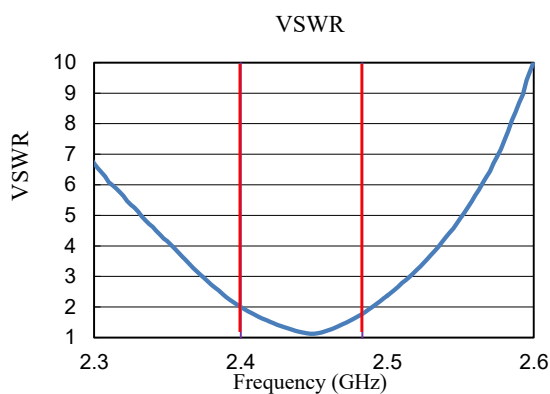
 : Chip Antenna

 : Land Pattern

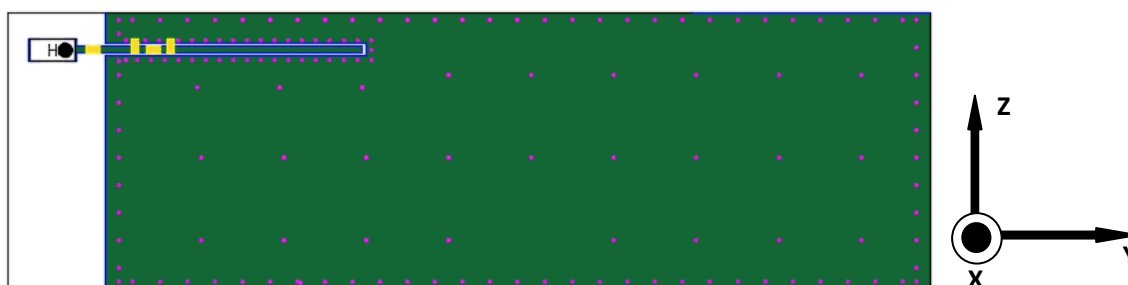
Electrical Characteristics

VSWR & Radiation

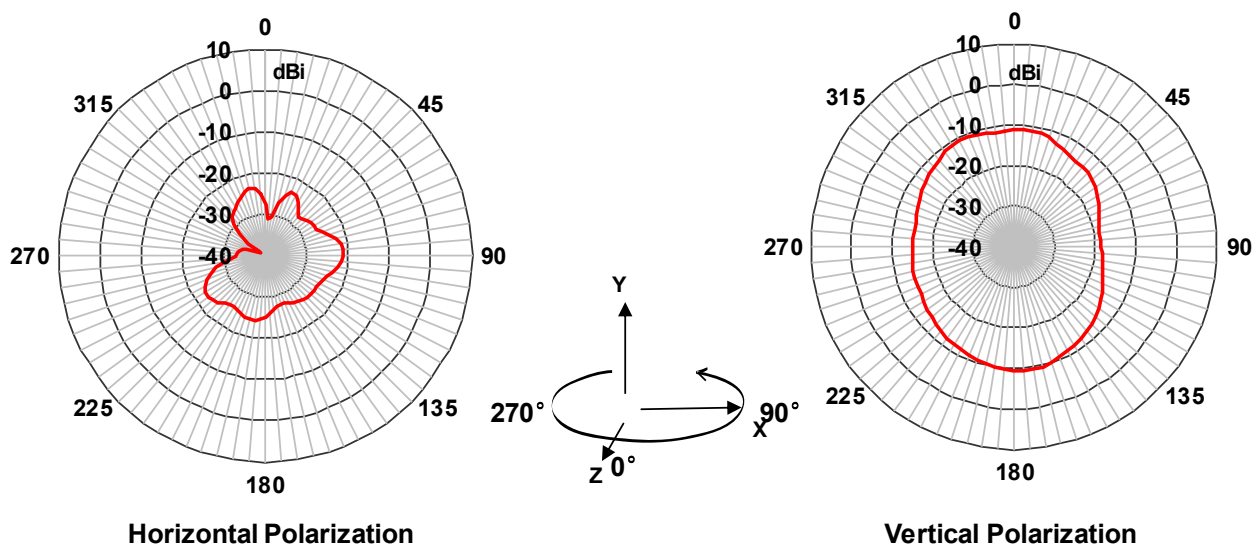
VSWR&Efficiency



Radiation Pattern



ZX-Plane

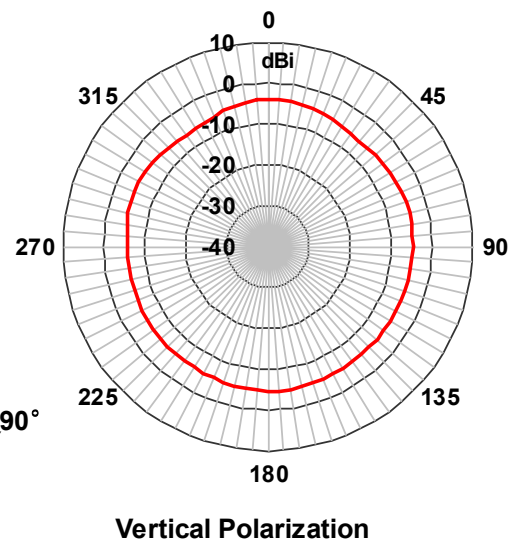
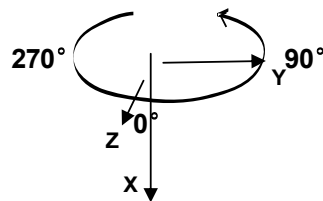
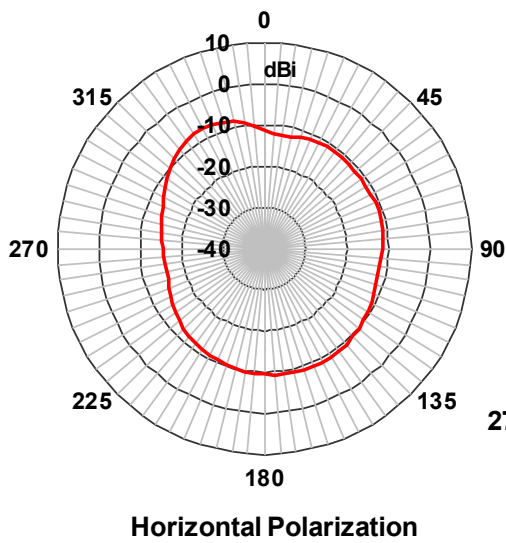


Frequency[GHz]	2.4	2.44	2.485
Average[dBi]	0.00	-25.45	0.00
Maximum[dBi]	0.00	-21.07	0.00
Minimum[dBi]	0.00	-38.75	0.00

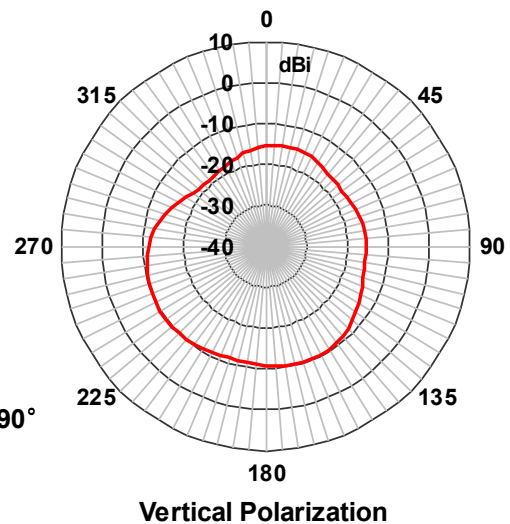
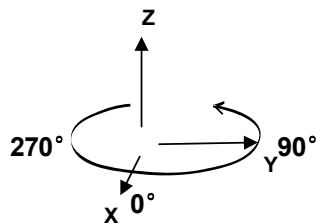
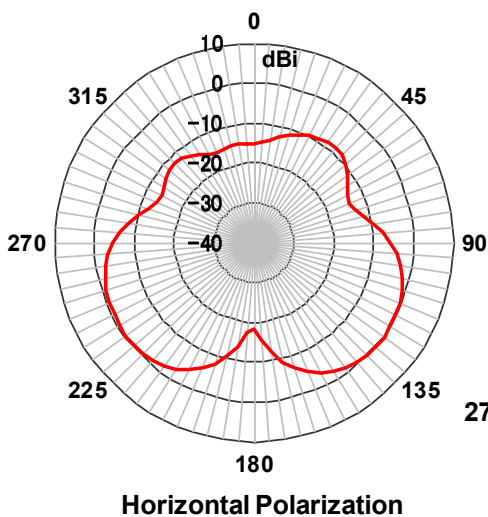
Frequency[GHz]	2.4	2.44	2.485
Average[dBi]	0.00	-12.71	0.00
Maximum[dBi]	0.00	-9.33	0.00
Minimum[dBi]	0.00	-18.60	0.00

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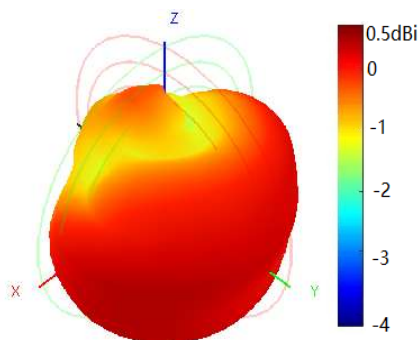
ZY-Plane



XY-Plane



2440MHz



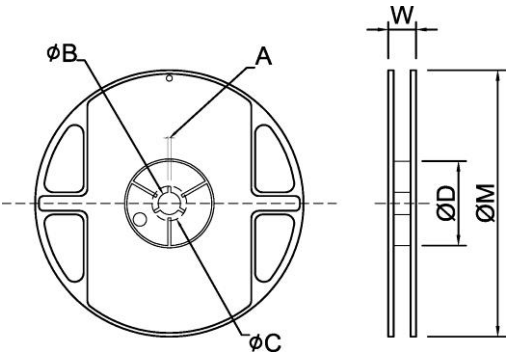
Freq/MHz	2440	2440	2484
Gain/dbi	0.21	0.5	0.1

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Taping Specifications

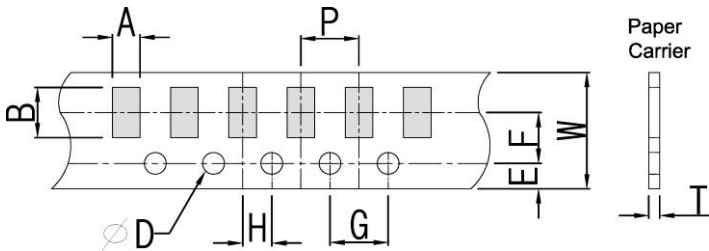
Reel and Taping Specification

Reel Specification



TYPE	SIZE		A	ϕB	ϕC	ϕD	W	ϕM
3216	7"	3K/Reel	2.0±0.5	13.5±1.0	21±1.0	60±1.0	11.5±2.0	178±2.0

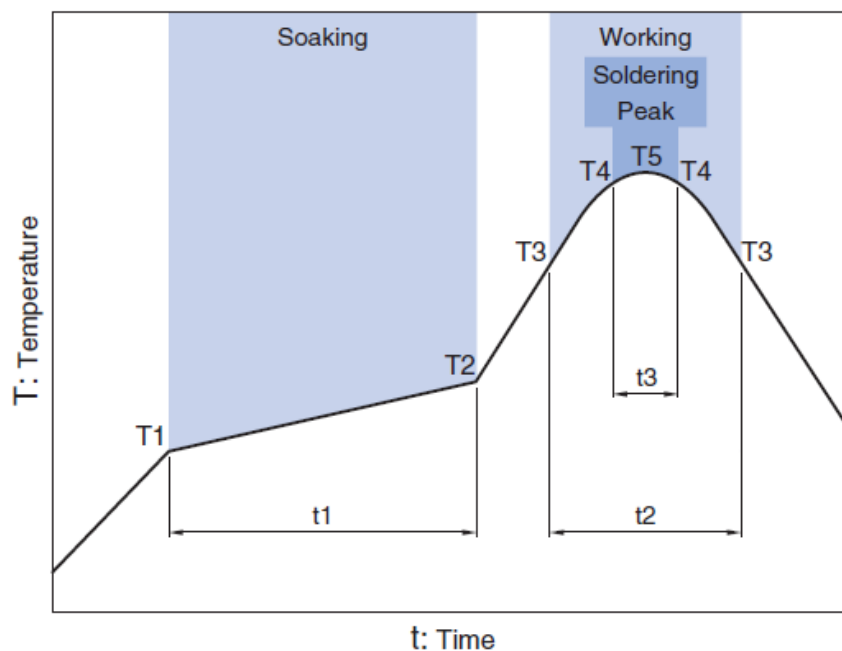
Taping Specification



Packaging	Type	A	B	W	E	F	G	H	T	ϕD	P
Paper Type	3216	1.90±0.20	3.50±0.20	8.0±0.20	1.75±0.10	3.5±0.05	4.0±0.10	2.0±0.05	0.75±0.10	1.50±0.10	4.0±0.1

Recommended Reflow Profile

Pb free solder



Soaking			Working		Soldering		Peak
Temp.		Time	Temp.	Time	Temp.	Time	Temp.
T1	T2	t1	T3	t2	T4	t3	T5
150°C	180°C	60 to 120sec	230°C	more than 30sec	247 to 253°C	within 10sec	260°C Max.

Revision History

Version	Date	Description
Ver.01	Apr.2023	New issue.