

2.4GHz 3216 Chip Antenna: ANT3216R24003KL2

Application:

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

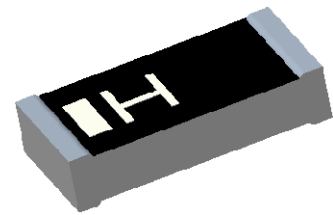
Features

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

Part number

ANT 3216 R 2400 3K L2
(1) (2) (3) (4) (5)

(1)Size Code	3.2x1.6mm
(2) Packing	Tape and reel
(3) Frequency	2.4GHz
(4) Packing Number	3K
(5)Code	L2



Electrical Specification

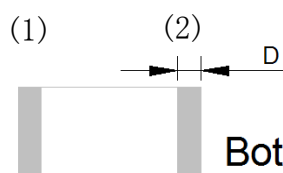
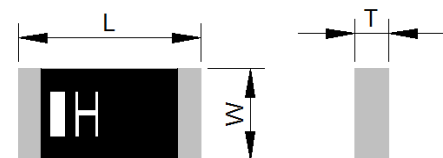
WorkingFrequencyRange	2400 ~2.484 MHz
Peak Gain	0.9dBi (Typ.)
Impedance	50 Ohm
VSWR	2.5(Max)
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Operation Temperature(°C)	-40 ~85°C

The specification is defined on HEK EVB.

Dimension and Terminal Configuration

Top

Side



Bottom

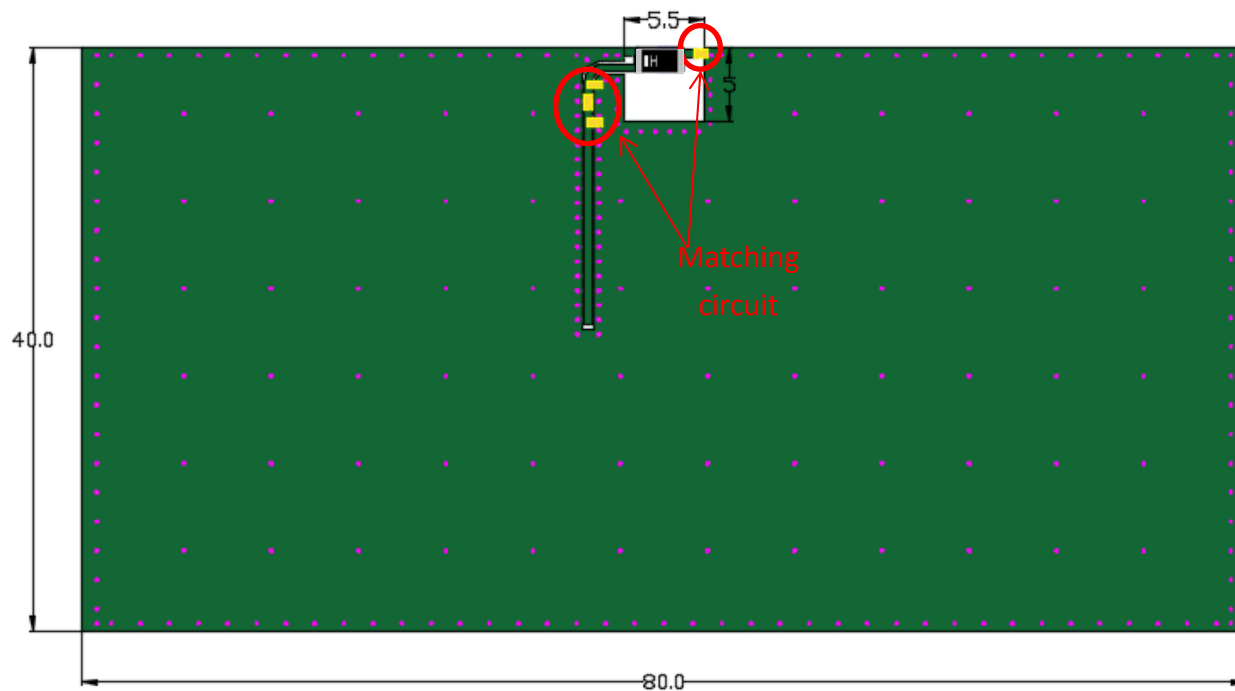
Dimension (mm)	
L	3.20+/-0.15
W	1.60+/-0.15
T	0.60+/-0.10
D	0.50+/-0.15

No.	Terminal Name
1	Feeding
2	Ground

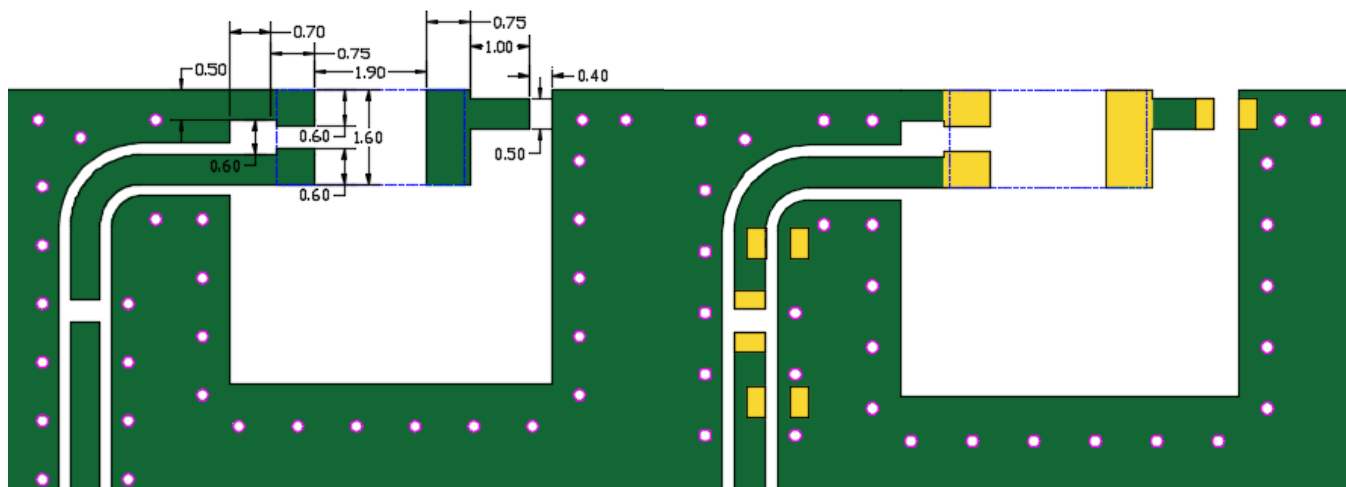
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Evaluation Board Reference

PCB Dimension



Antenna Layout Reference



Unit : mm

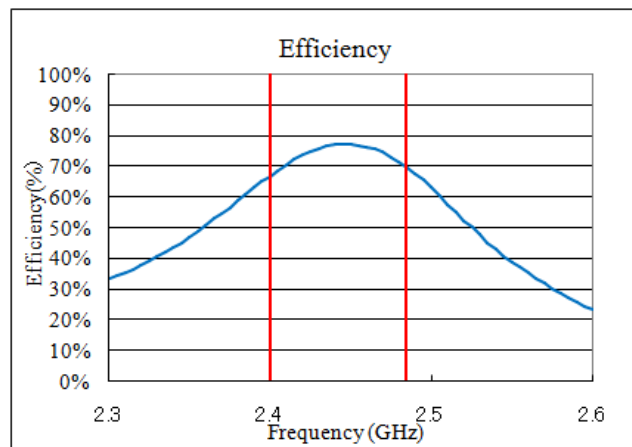
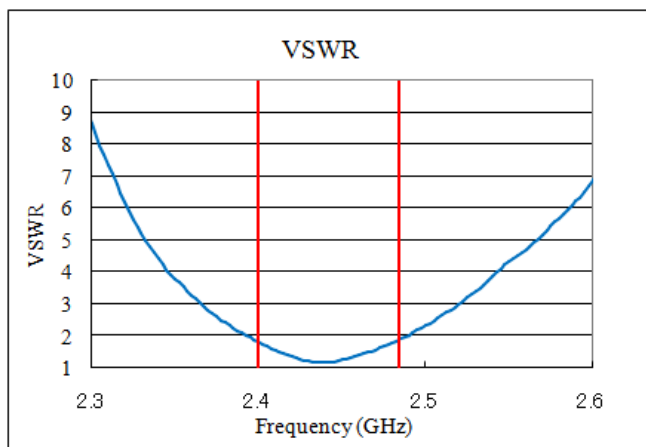
 : Chip Antenna

 : Land Pattern

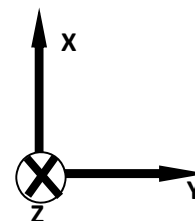
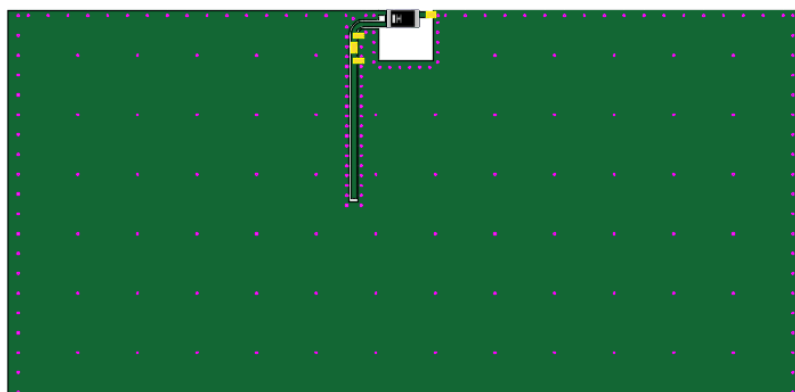


Electrical Characteristics

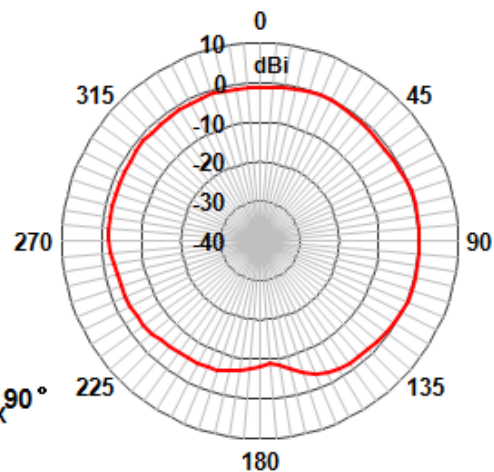
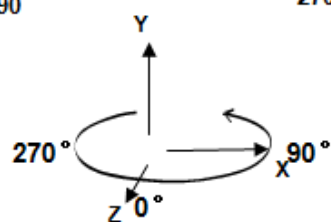
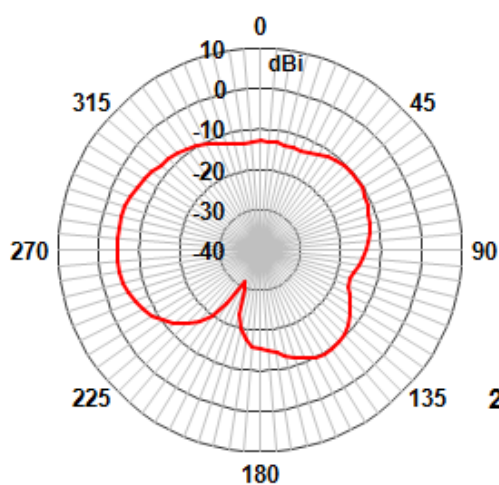
VSWR&Efficiency

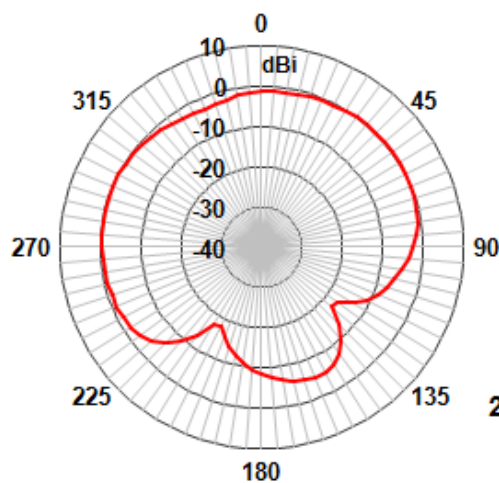


Radiation Pattern

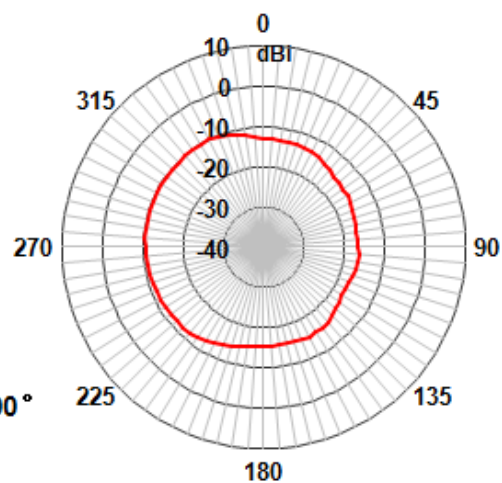
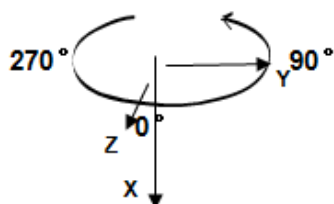


ZX-Plane

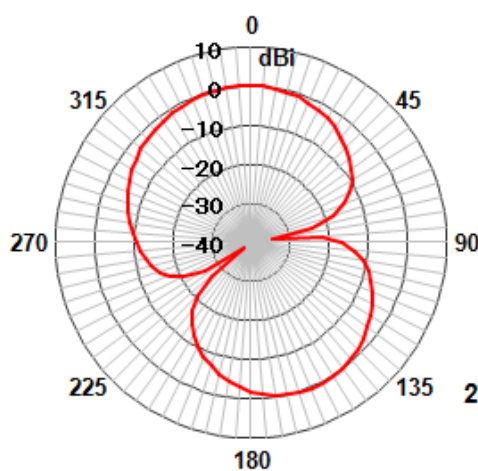


ZY-Plane

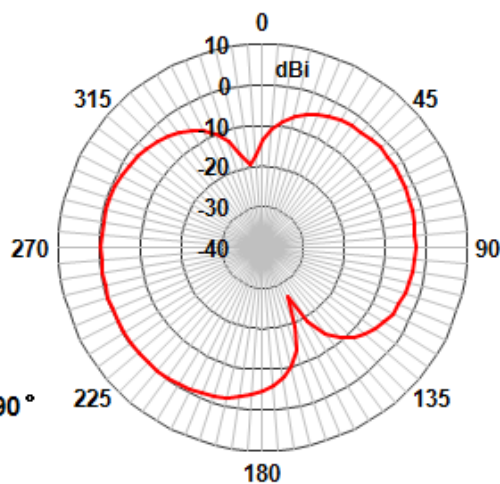
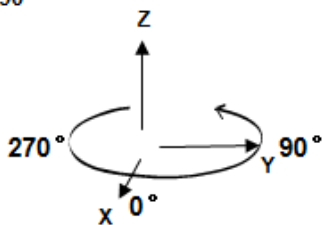
Horizontal Polarization



Vertical Polarization

XY-Plane

Horizontal Polarization



Vertical Polarization

Antenna Gain

Gain Table

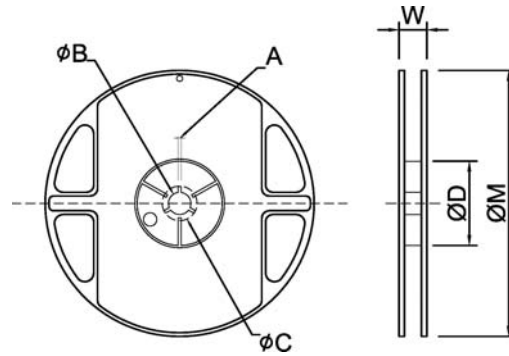
Unit in <u>dBi</u> @2400-2500MHz	<u>XY-plane</u>		<u>XZ-plane</u>		<u>YZ-plane</u>		Efficiency
	Peak	Avg.	Peak	Avg.	Peak	Avg.	
Module Board	0.4	-0.5	0.9	-3.6	0.3	-3.0	60.2 %

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Taping Specifications

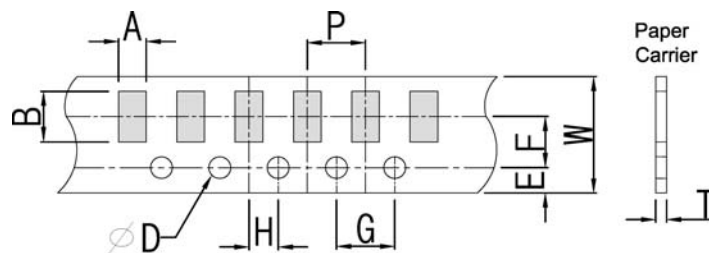
Reel and Taping Specification

Reel Specification



TYPE	SIZE		A	ϕ B	ϕ C	ϕ D	W	ϕ M
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

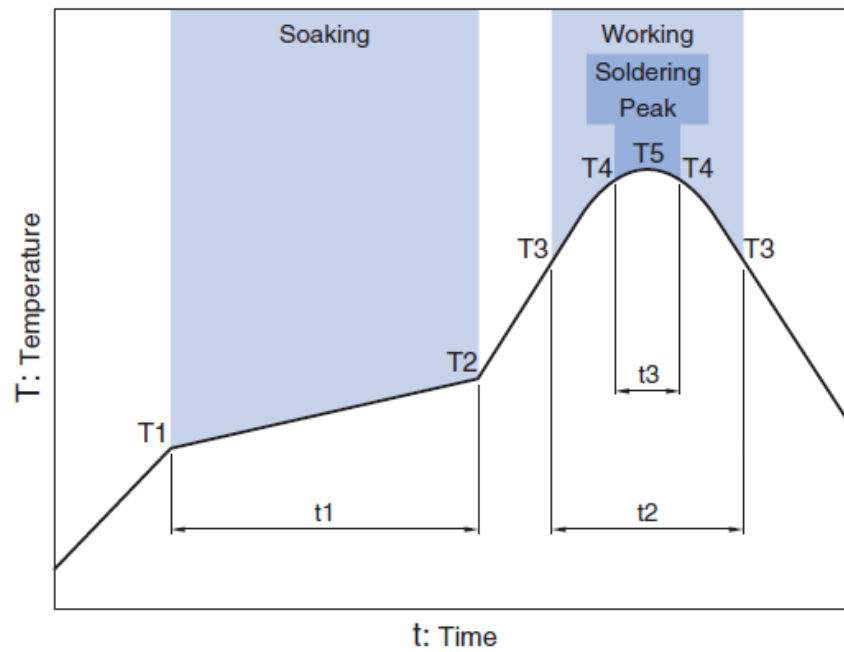


Packaging	Type	A	B	W	E	F	G	H	T	ϕD	P
Paper Type	3216	1.90±0.20	3.50±0.20	8.0±0.20	1.75±0.10	3.5±0.05	4.0±0.10	2.0±0.05	0.75±0.10	1.50 +0.10 -0	4.0±0.1

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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.

April. 2020 Ver.H01