

2.4GHz 3216 Chip Antenna: ANT3216R24003KL0

Application:

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

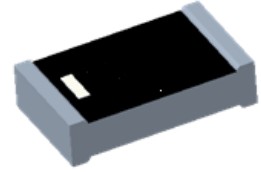
Features

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

Manufacturer: Microlife Corporation

Part number

ANT 3216 R 2400 3K L0
 (1) (2) (3) (4) (5)



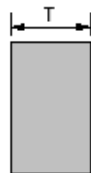
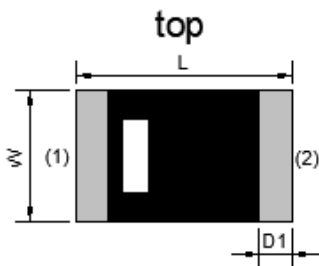
(1)Size Code	3.2x1.6mm
(2) Packing	Tape and reel
(3) Frequency	2.4GHz
(4) Packing Number	3K
(5)Code	L1

Electrical Specification

Working FrequencyRange	2400 ~2484 MHz
Peak Gain	1.08dBi (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.

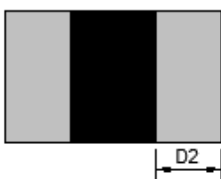
Dimension and Terminal Configuration



Dimension (mm)	
L	3.20+/-0.15
W	1.60+/-0.15
T	0.60+/-0.10
D1	0.50+/-0.15
D2	1.30+/-0.15

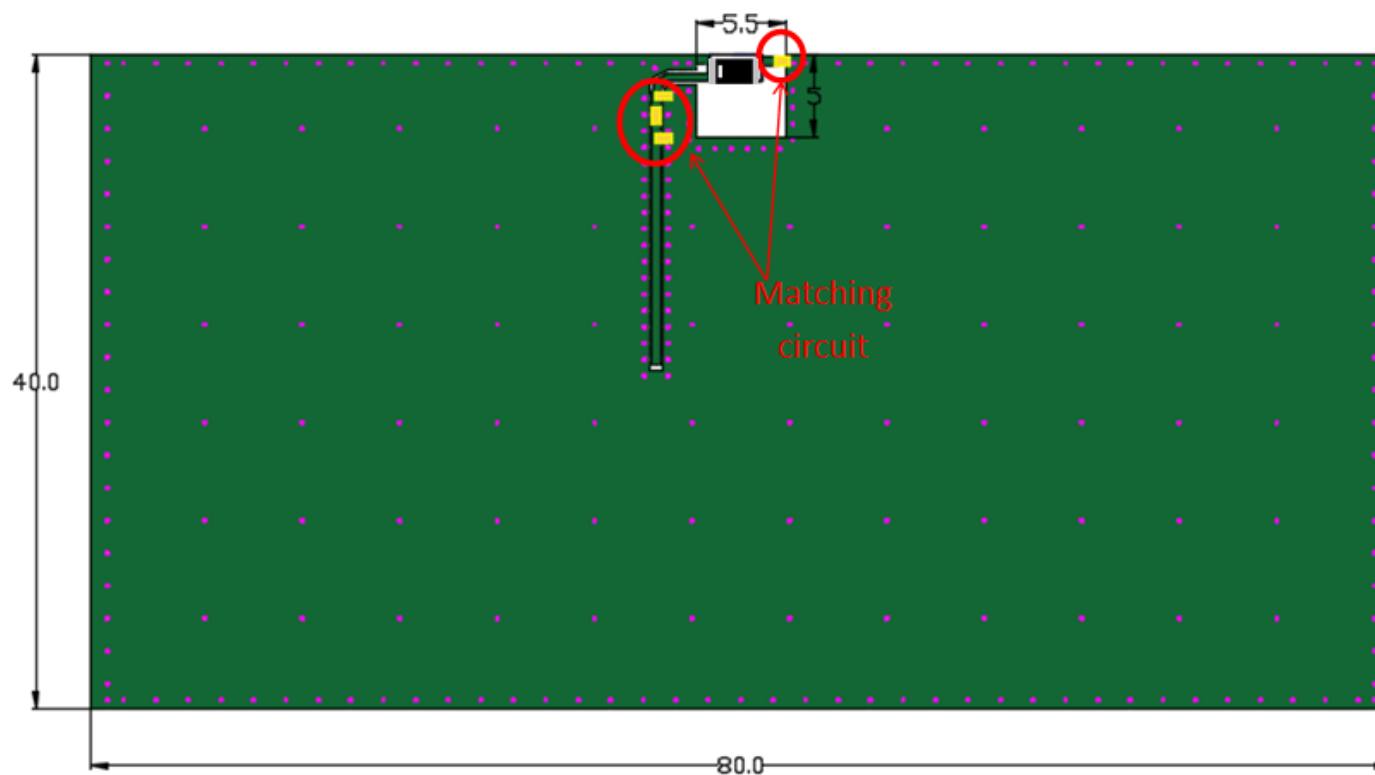
No.	Terminal Name
1	Feeding
2	Ground

btm

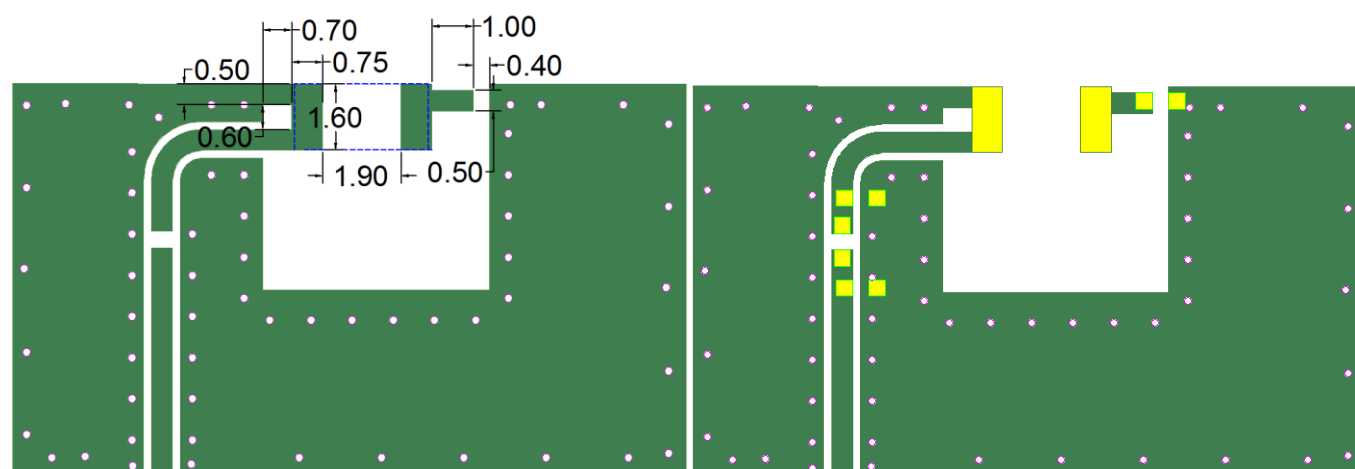


Evaluation Board Reference

PCB Dimension



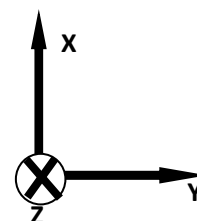
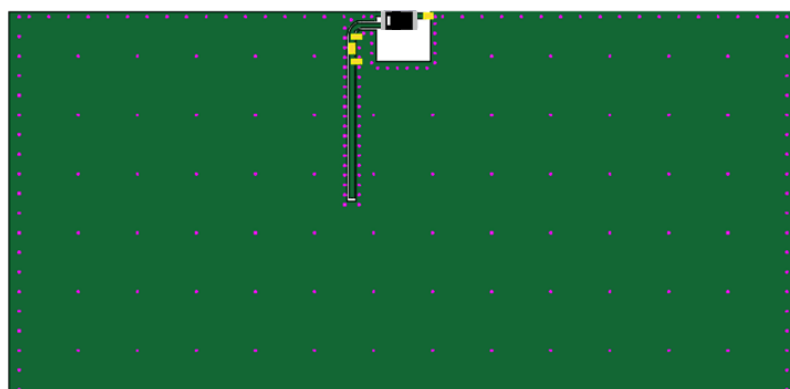
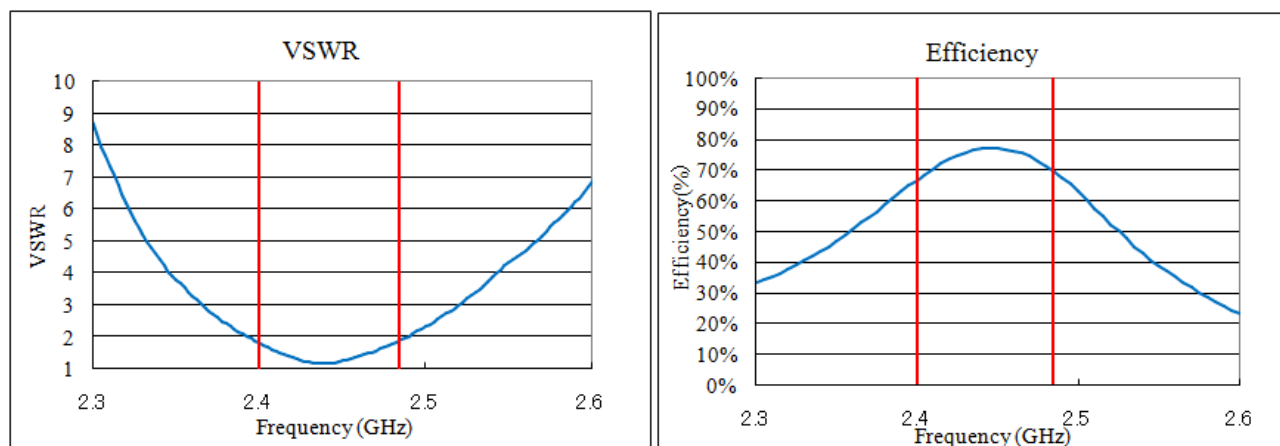
Antenna Layout Reference



Unit : mm

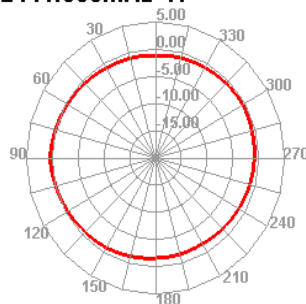
Electrical Characteristics

VSWR

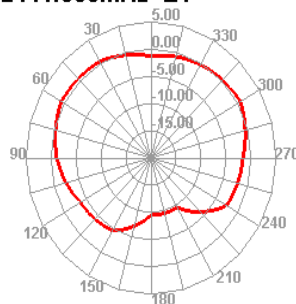


Radiation Pattern

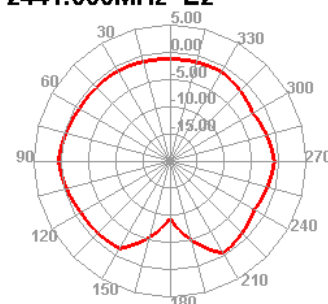
2441.000MHz H



2441.000MHz E1



2441.000MHz E2

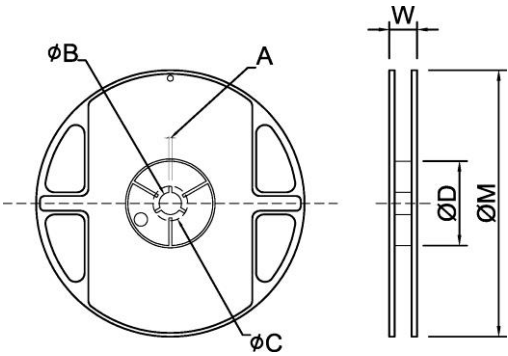


Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Peak Gain (dBi)
2400	76.7	-1.15	1.3
2410	80.42	-0.95	1.28
2420	80.07	-0.97	1.18
2430	81.12	-0.91	1.22
2440	85.93	-0.66	1.08
2450	85.86	-0.66	1.18
2460	83.68	-0.77	1.44
2470	80.83	-0.92	1.37
2480	78.91	-1.03	1.44
2490	79.81	-0.98	1.53
2500	76.3	-1.18	1.58

Taping Specifications

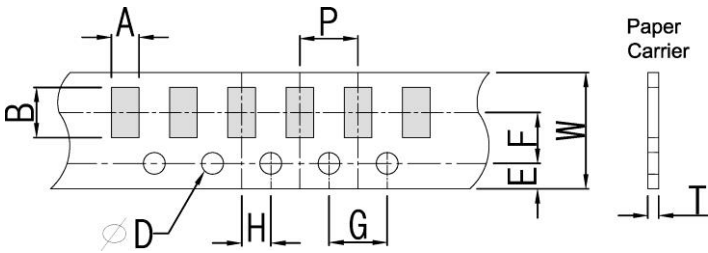
Reel and Taping Specification

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

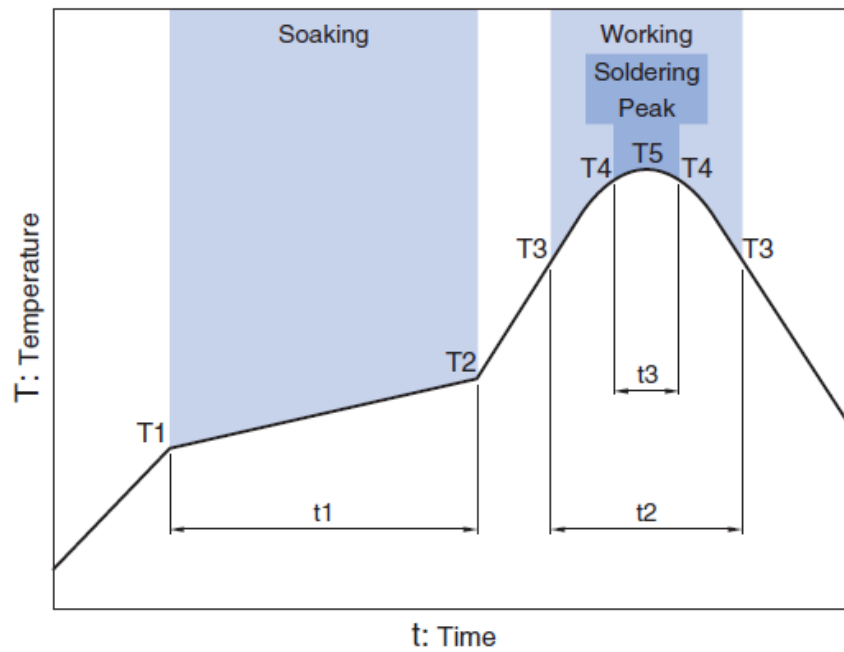
Taping Specification



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 -0	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.

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