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生效日期: 2025-12-22

东莞市合康电子有限公司

Dongguan Hekang Electronic co., LTD

Chip Antenna

承 认 书

客户名称: 成都四相致新科技有限公司	制造商/Manufacturer: 东莞市合康电子有限公司
客户料号:	产品型号/Model: 3216 Chip Antenna, (R) , 2400MHz, Type3KM
部品名: 陶瓷天线	产品料号/Product Part Number: ANT3216R24003KM1 版本/Version: A01

客户接受

This Specifications is received

签 章 SIGN:

接受日 DATE:

拟 制 Drawn by	审 核 Checked by	批 准 Approved by

TEL:0769-87888306

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Business Mailbox : fae@hekcorp.com

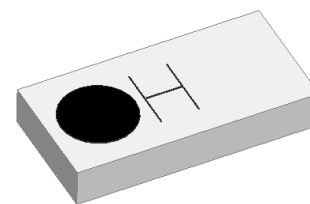
Address: ROOM 301, BUILDING 7, SHIDAI ZHIRUI TECHNOLOGY, NO. 159 LUWU
SANLIAN ROAD, CHANGPING TOWN, DONGGUAN CITY, GUANGDONG PROVINCE

2.4GHz 3216 Chip Antenna: ANT3216R24003KM1**Applications:**

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

Features

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

**Part number**

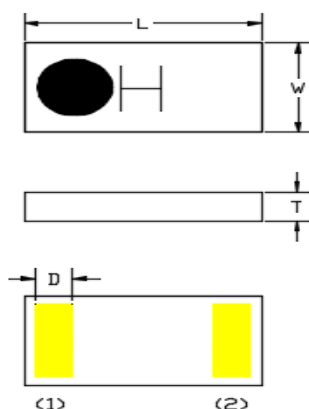
ANT 3216 R 2400 3K M1
 (1) (2) (3) (4) (5)

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

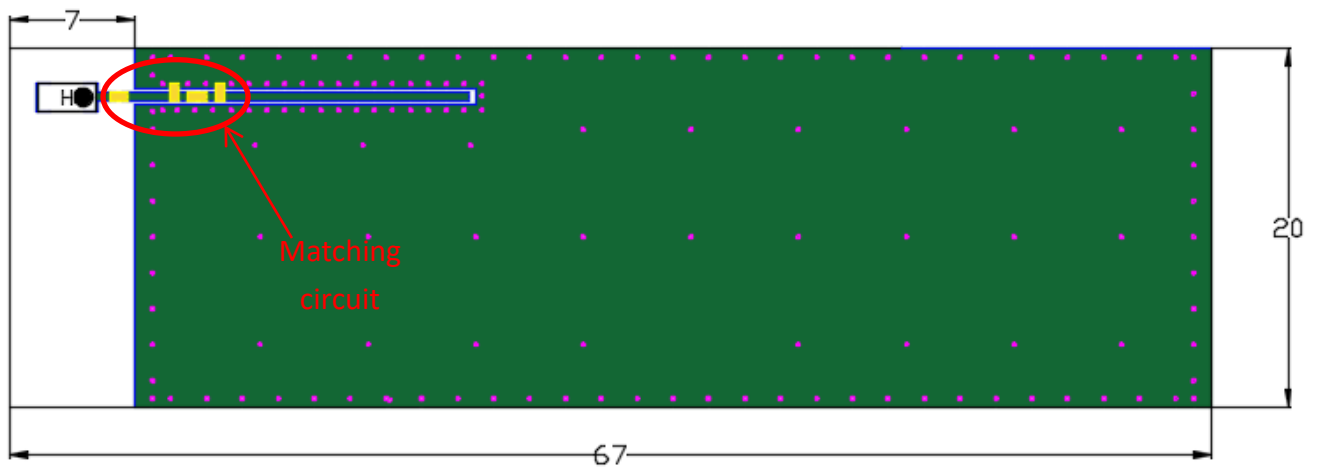
Dimension (mm)	
L	3.20±0.15
W	1.60±0.15
T	0.55±0.10
D	0.50±0.15

No.	Terminal Name
1	Feeding
2	Soldering

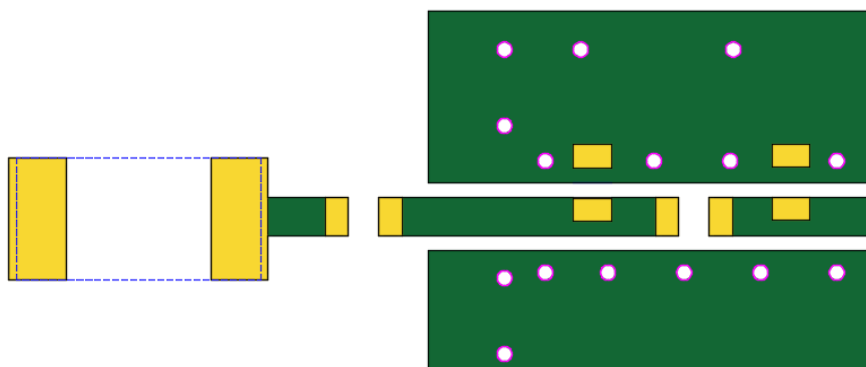
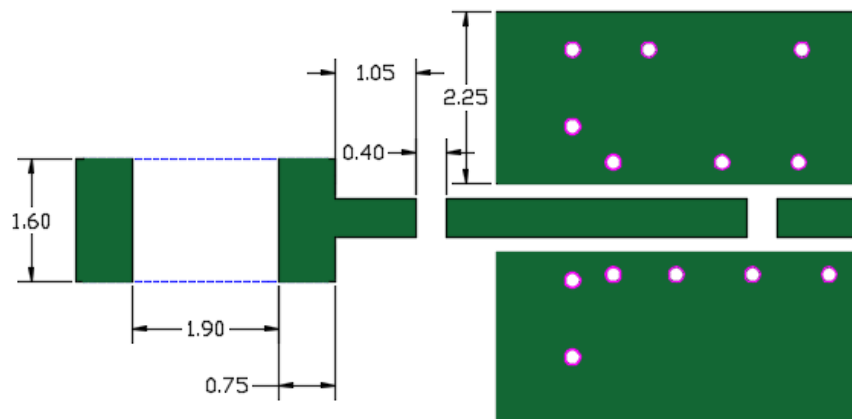
2.4GHz 3216 Chip Antenna: ANT3216R24003KM1

Evaluation Board Reference

PCB Dimension



Antenna Layout Reference



Unit : mm

 : Chip Antenna

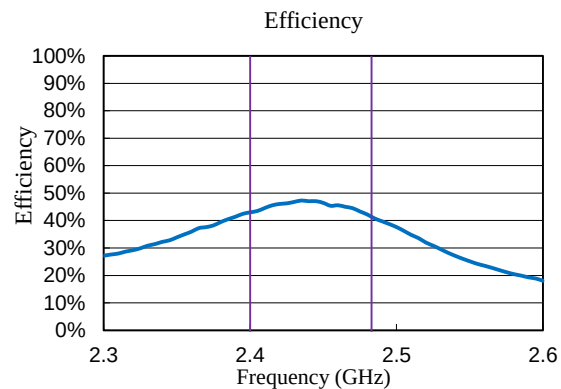
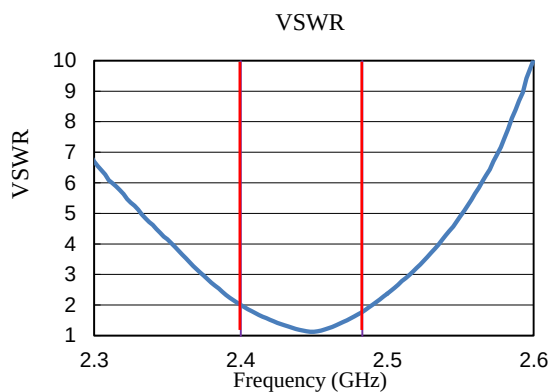
 : Land Pattern

2.4GHz 3216 Chip Antenna: ANT3216R24003KM1

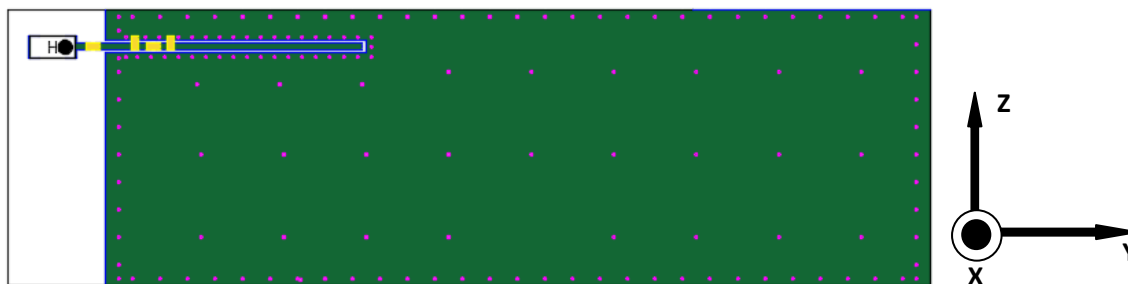
Electrical Characteristics

Return Loss & Radiation

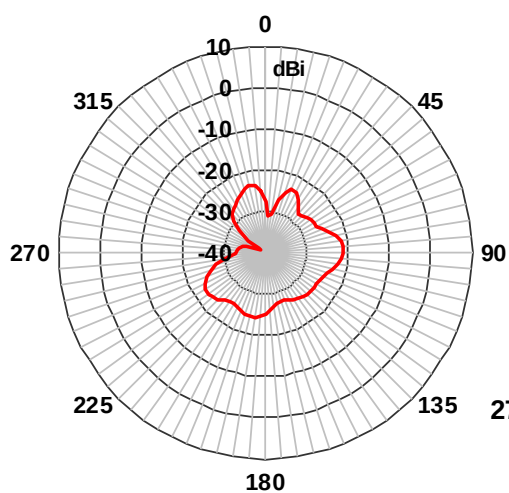
VSWR&Efficiency



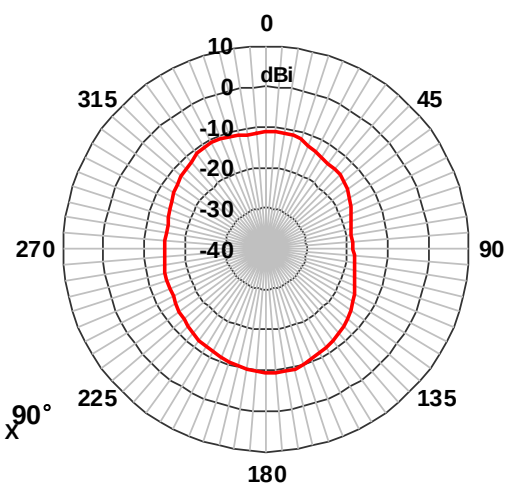
Radiation Pattern



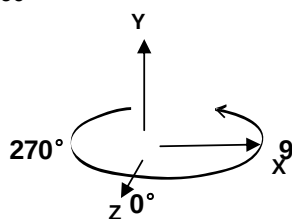
ZX-Plane



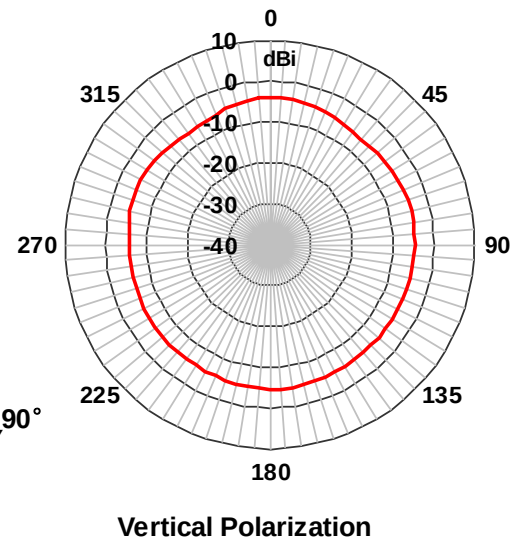
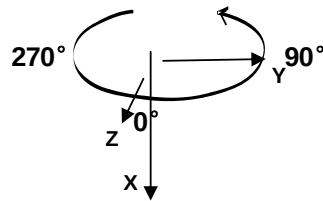
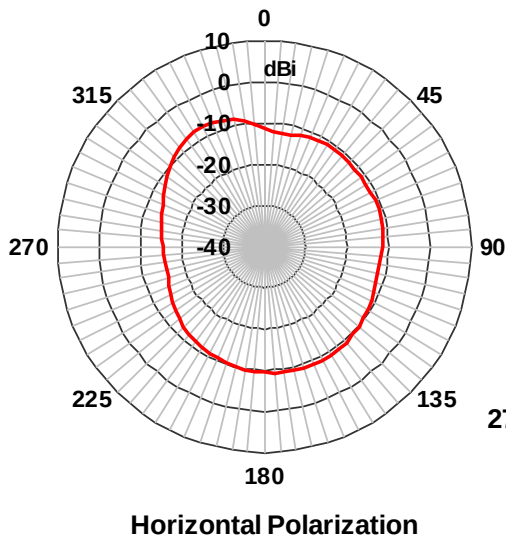
Horizontal Polarization



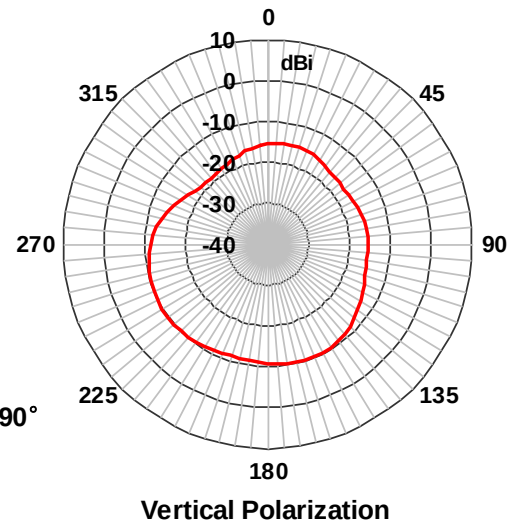
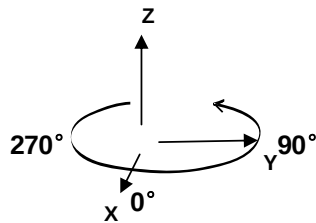
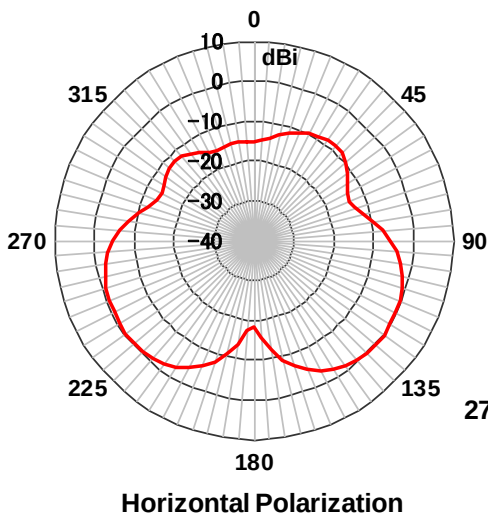
Vertical Polarization



ZY-Plane



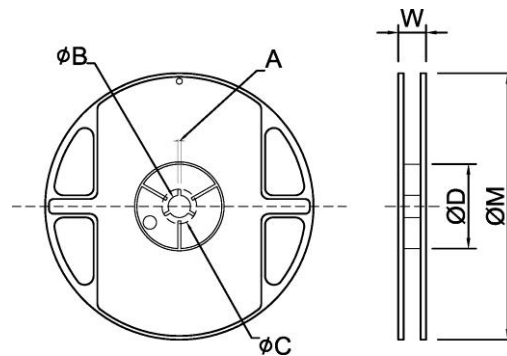
XY-Plane



Taping Specifications

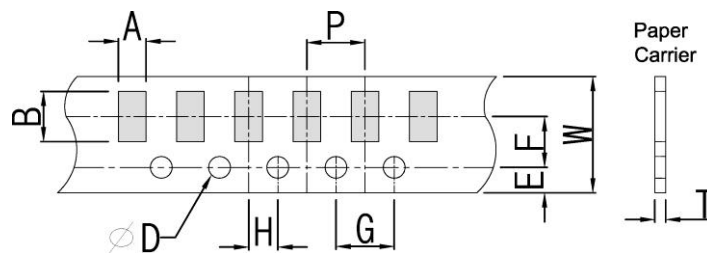
Reel and Taping Specification

Reel Specification



TYPE	SIZE		A	ψB	ψC	ψD	W	ψM
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

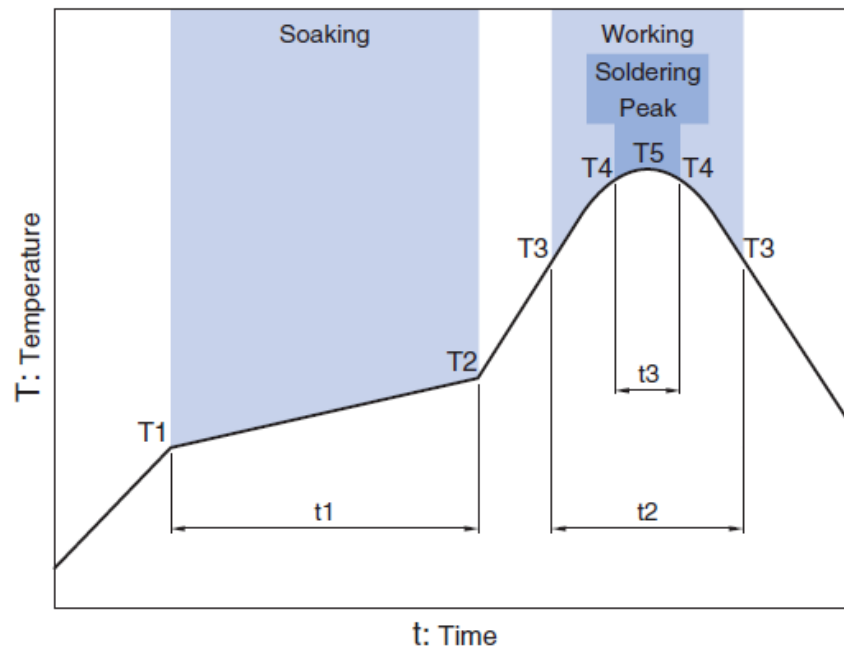
Taping Specification



Packaging	Type	A	B	W	E	F	G	H	T	ψD	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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