

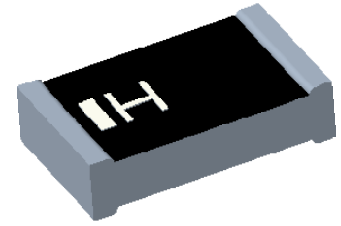
2.4GHz 2012Chip Antenna: ANT2012R24005KL3

Application:

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

Features

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



Part number

ANT 2012 R 2400 5K L3
(1) (2) (3) (4) (5)

(1)Size Code	2.0x1.2mm
(2) Packing	Tape and reel
(3) Frequency	2.4GHz
(4) Packing Number	5K
(5)Code	L3

Electrical Specification

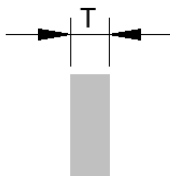
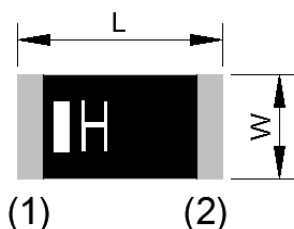
Working Frequency Range	2400 ~2484 MHz
Peak Gain	0.23dBi (Typ.)
Impedance	50 Ohm
VSWR	2.5(Max)
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Operation Temperature(°C)	-40 ~85°C

The specification is defined on HEK EVB.

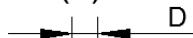
Dimension and Terminal Configuration

Top

Side



(1) (2)



Bottom

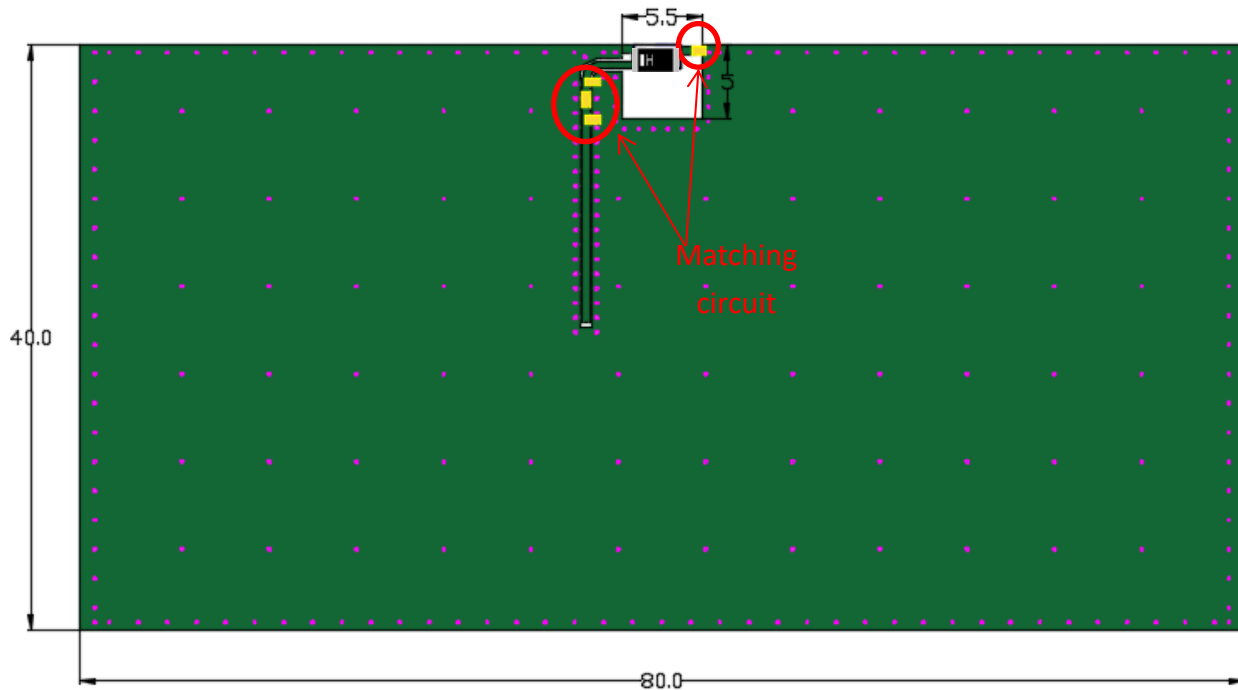
Dimension (mm)	
L	2.00±0.15
W	1.20±0.15
T	0.50±0.10
D	0.20±0.15

No.	Terminal Name
1	Feeding
2	Ground

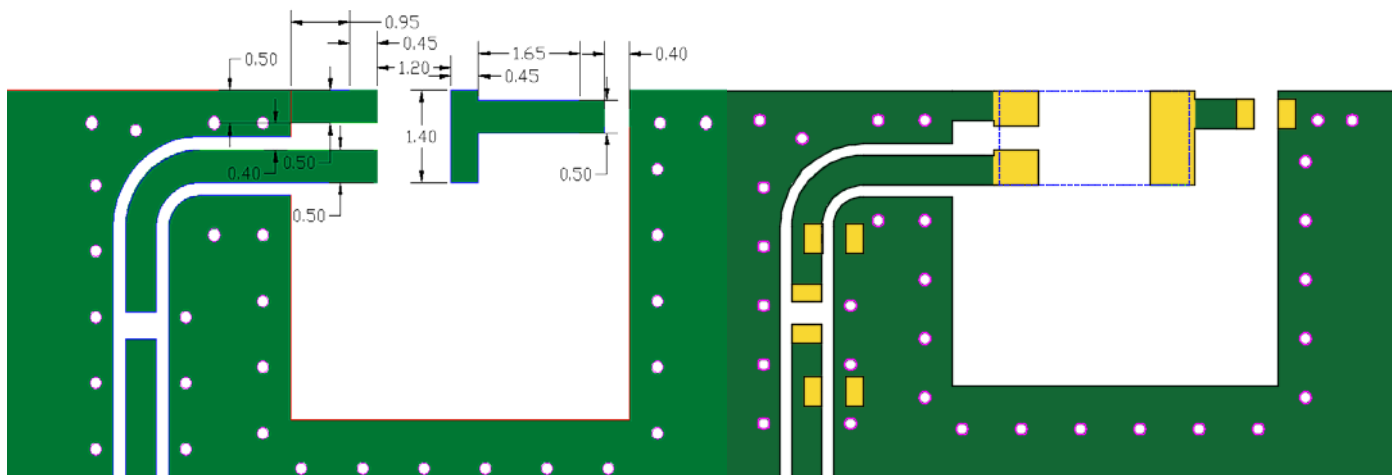
2.4GHz 2012Chip Antenna: ANT2012R24005KL3

Evaluation Board Reference

PCB Dimension



Antenna Layout Reference



Unit : mm

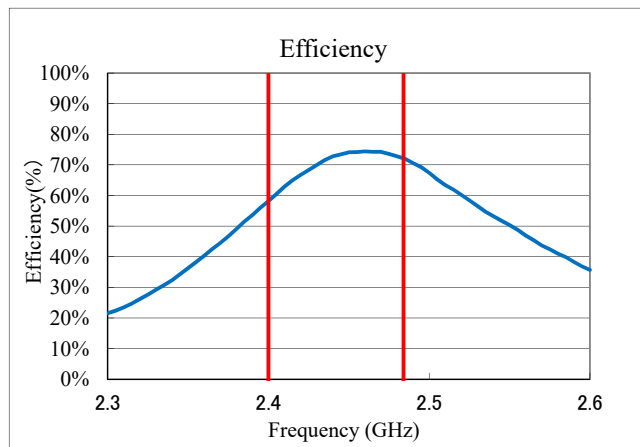
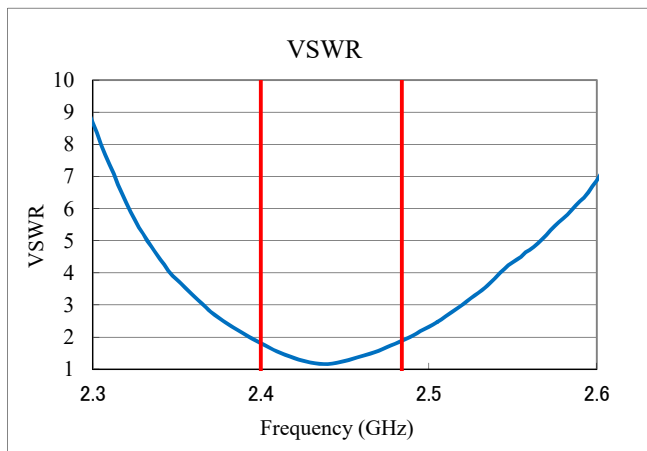
: Chip Antenna

: Land Pattern

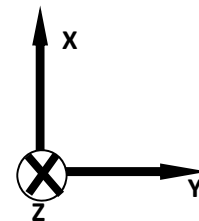
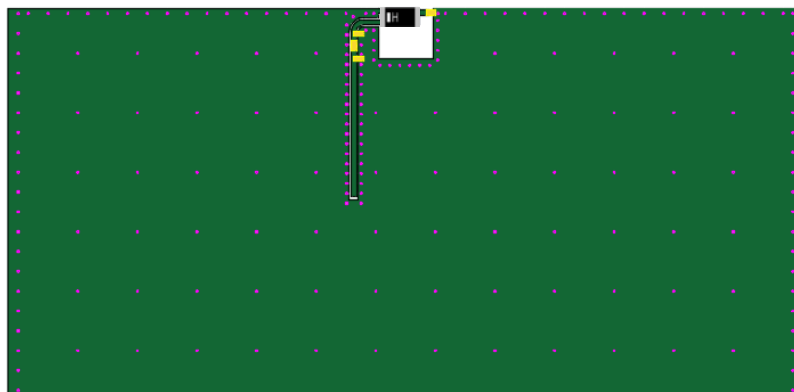
Shenzhen Youbi Electronics Co.,LTD
Room 106, Building A,Xinzheng Industrial Park,
57 Liuxian Road, Bao 'an District, Shenzhen

Electrical Characteristics

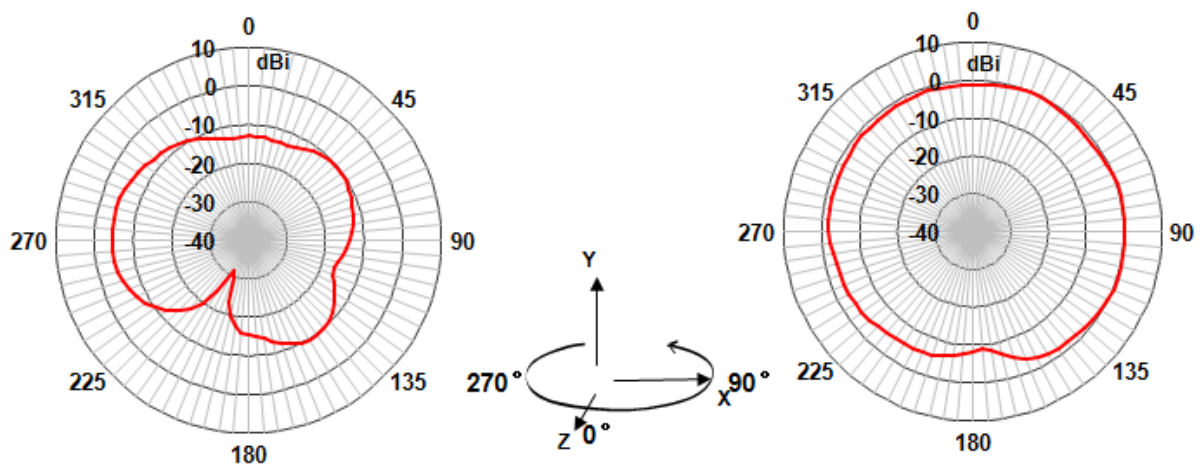
VSWR&Efficiency



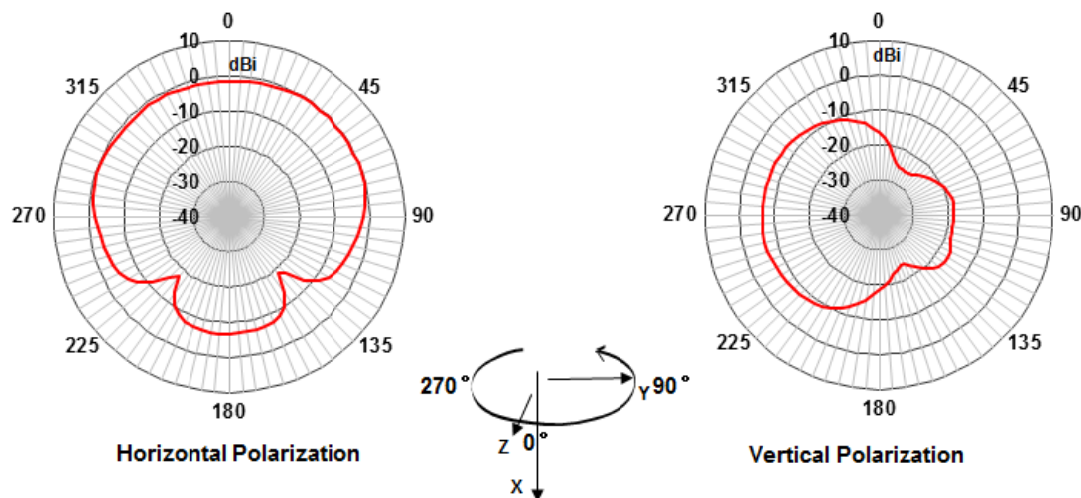
Radiation Pattern



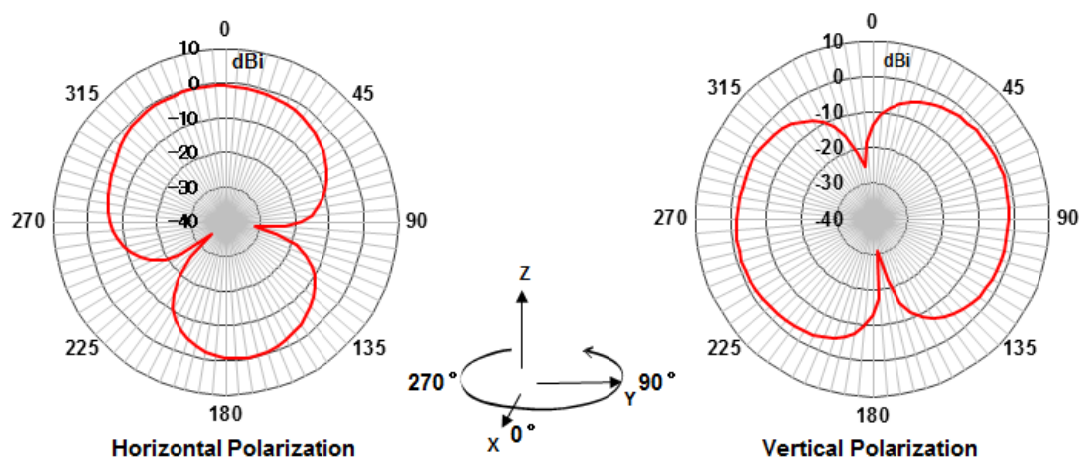
ZX-Plane



ZY-Plane



XY-Plane

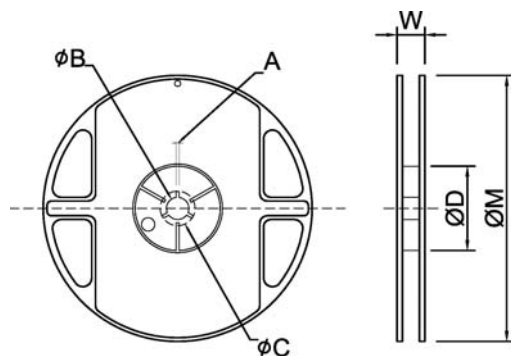


Fueq (MHz)	Effi (%)	Gian (dB)	Gian(dBi)
2402	42.15	-3.89	-0.34
2441	42.45	-3.76	0.23
2484	40.56	-3.99	-0.44

Taping Specifications

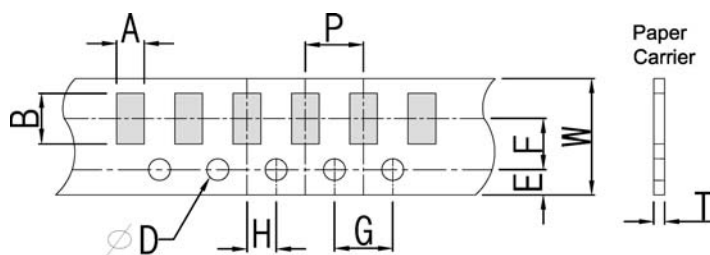
Reel and Taping Specification

Reel Specification



TYPE	SIZE		A	ψB	ψC	ψD	W	ψM
2012	7"	5K/Reel	2.0 $\pm$ 0.5	13.5 $\pm$ 1.0	21 $\pm$ 1.0	60 $\pm$ 1.0	11.5 $\pm$ 2.0	178 $\pm$ 2.0

Taping Specification

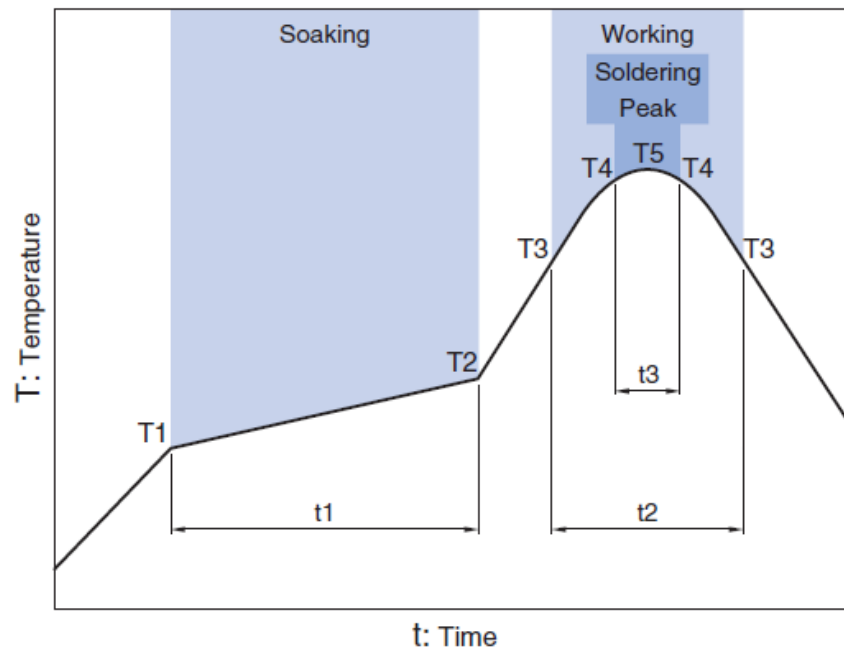


Packaging	Type	A	B	W	E	F	G	H	T	ψD	P
Paper Type	2012	1.50 $\pm$ 0.20	2.30 $\pm$ 0.20	8.0 $\pm$ 0.20	1.75 $\pm$ 0.10	3.5 $\pm$ 0.05	4.0 $\pm$ 0.10	2.0 $\pm$ 0.05	0.75 $\pm$ 0.10	1.50 ^{+0.10} ₋₀	4.0 $\pm$ 0.1

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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.

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