

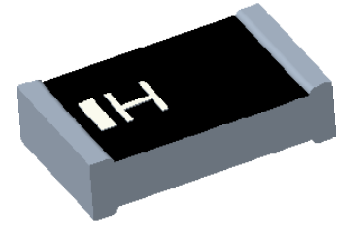
2.4GHz 2012Chip Antenna: ANT2012R24005KL2

Application:

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

Features

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



Part number

ANT 2012 R 2400 5K L2
(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	L2

Electrical Specification

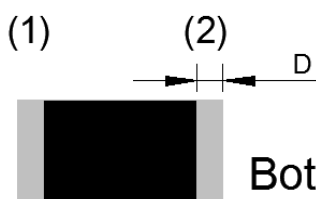
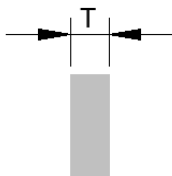
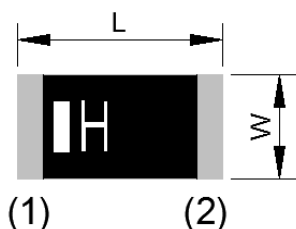
Working Frequency Range	2400 ~2484 MHz
Peak Gain	0.8dBi (Typ.)
Impedance	50 Ohm
VSWR	2.5(Max)
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Operation Temperature(°C)	-40 ~85°C

The specification is defined on HEK EVB.

Dimension and Terminal Configuration

Top

Side



Bottom

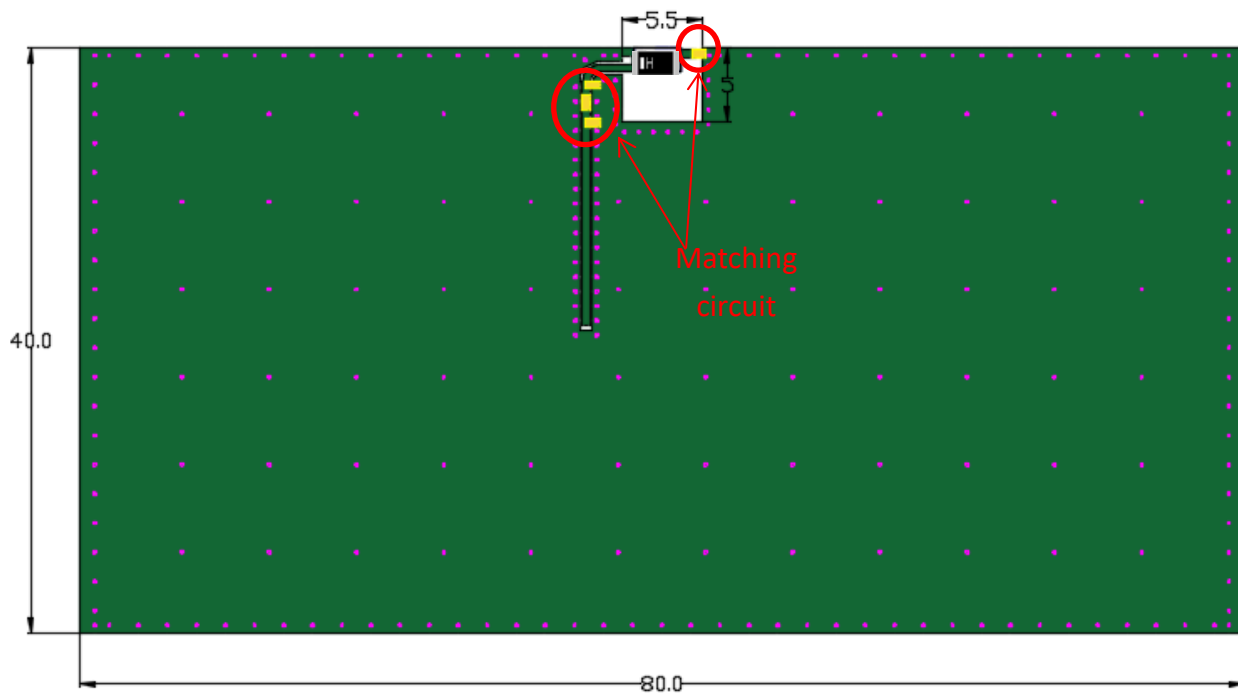
Dimension (mm)	
L	2.00±0.15
W	1.20±0.15
T	0.50±0.10
D	0.20±0.15

No.	Terminal Name
1	Feeding
2	Ground

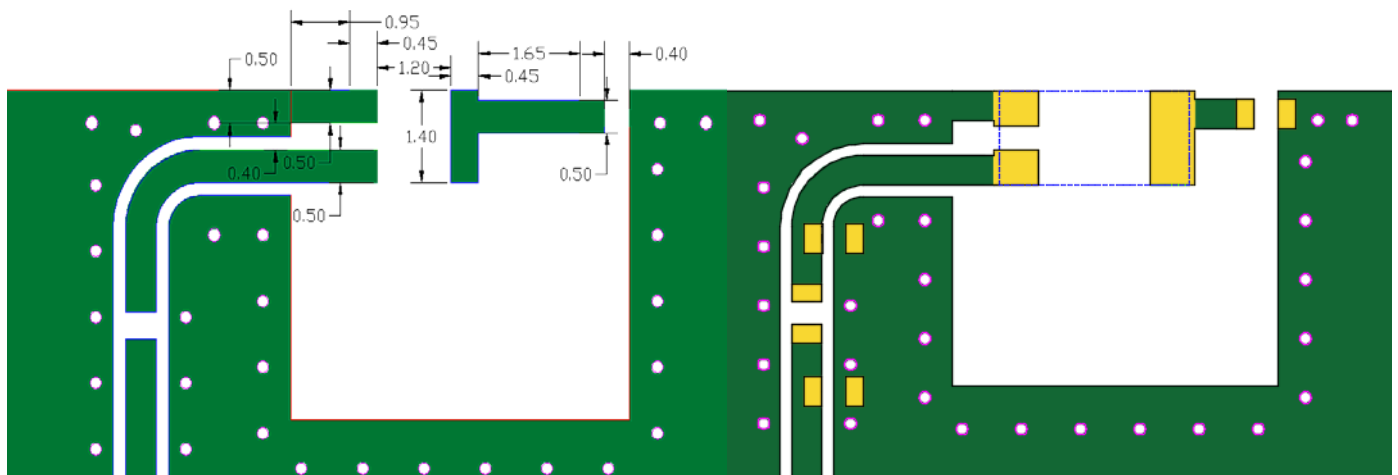
2.4GHz 2012Chip Antenna: ANT2012R24005KL2

Evaluation Board Reference

PCB Dimension



Antenna Layout Reference



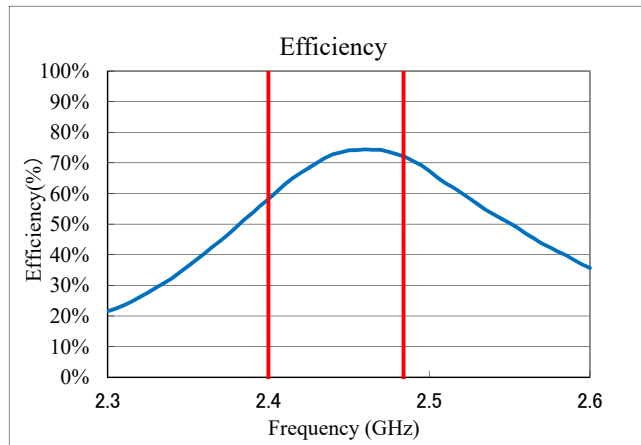
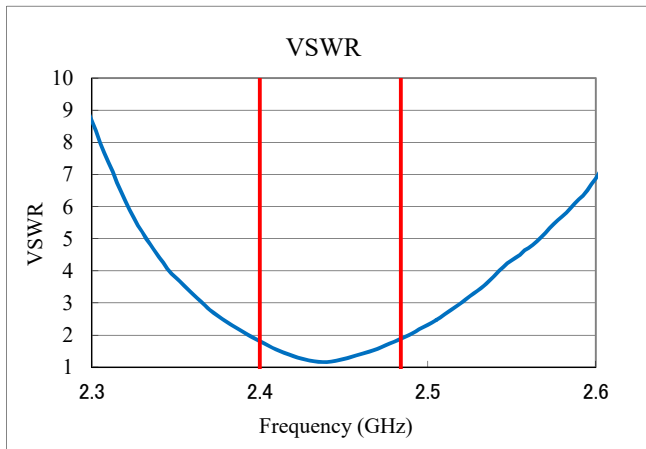
Unit : mm

 : Chip Antenna

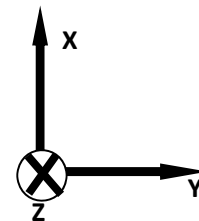
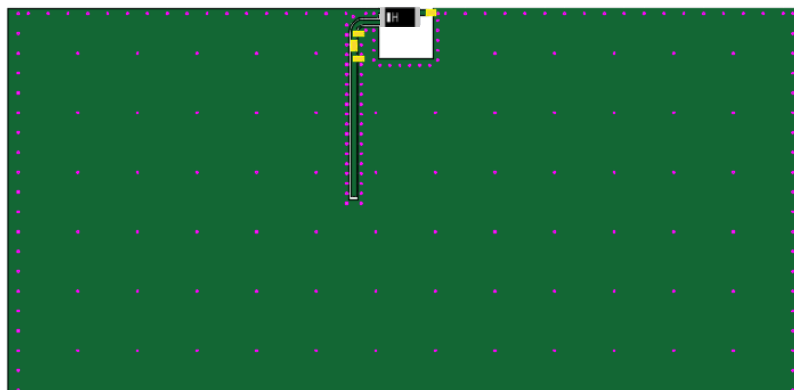
 : Land Pattern

Electrical Characteristics

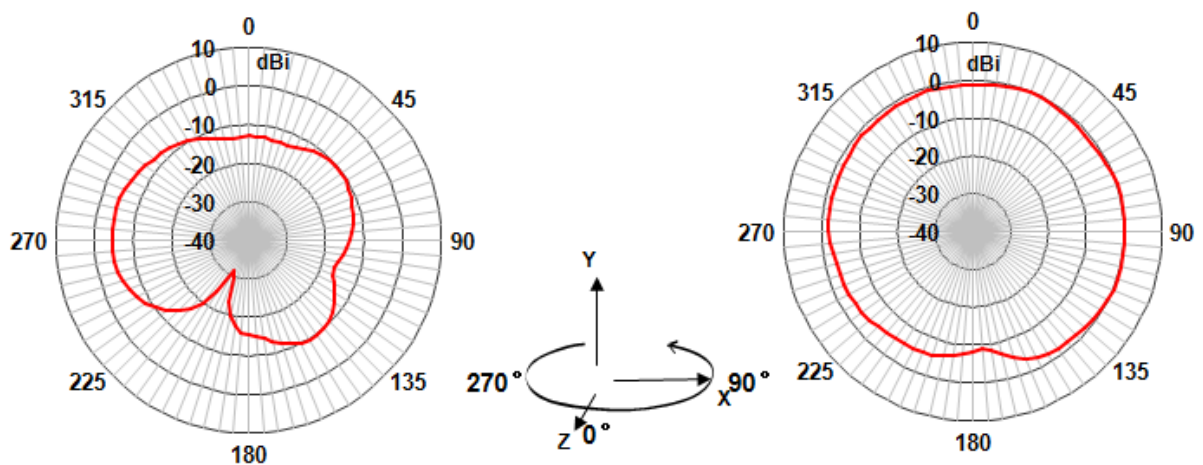
VSWR&Efficiency



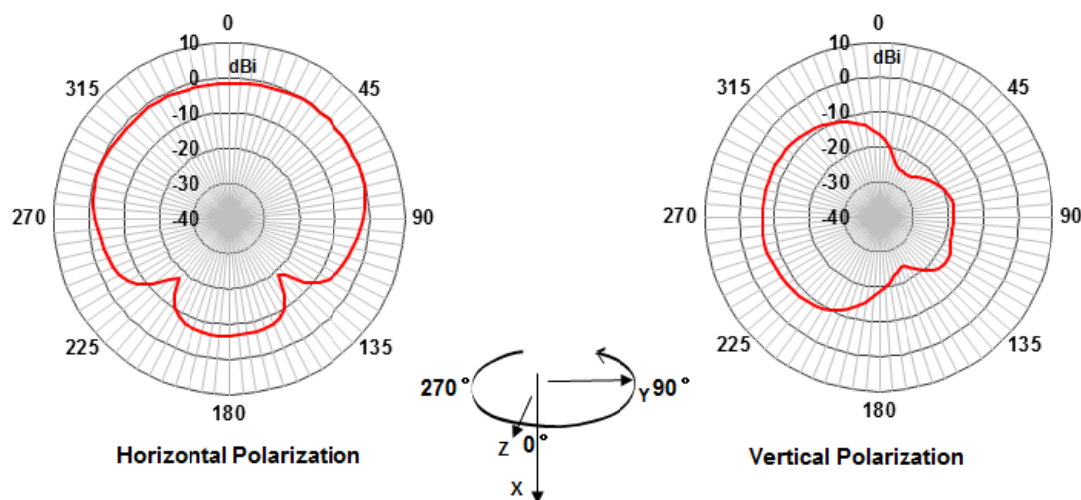
Radiation Pattern



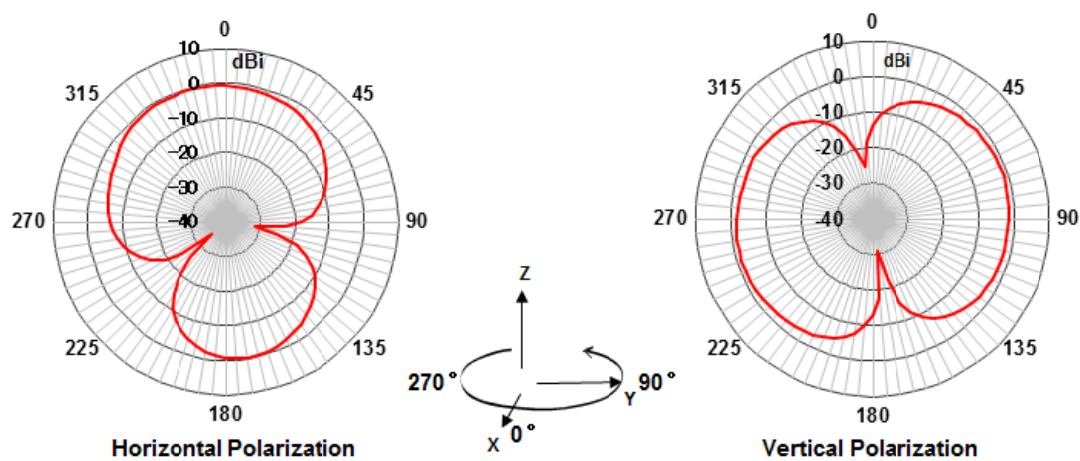
ZX-Plane



ZY-Plane



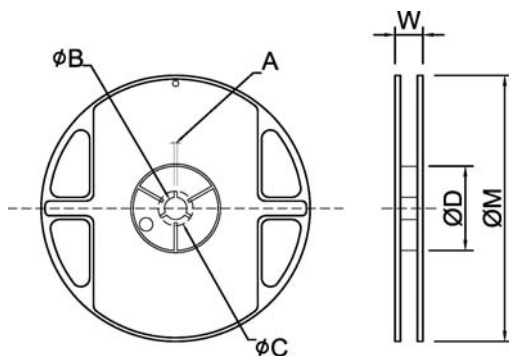
XY-Plane



Taping Specifications

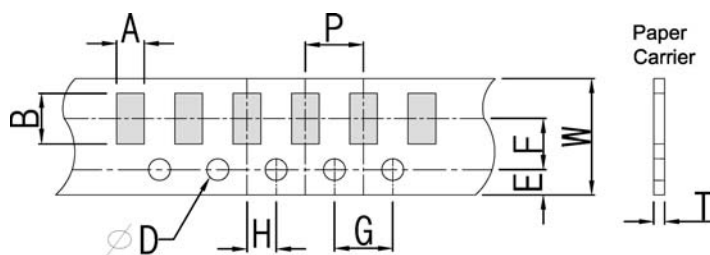
Reel and Taping Specification

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

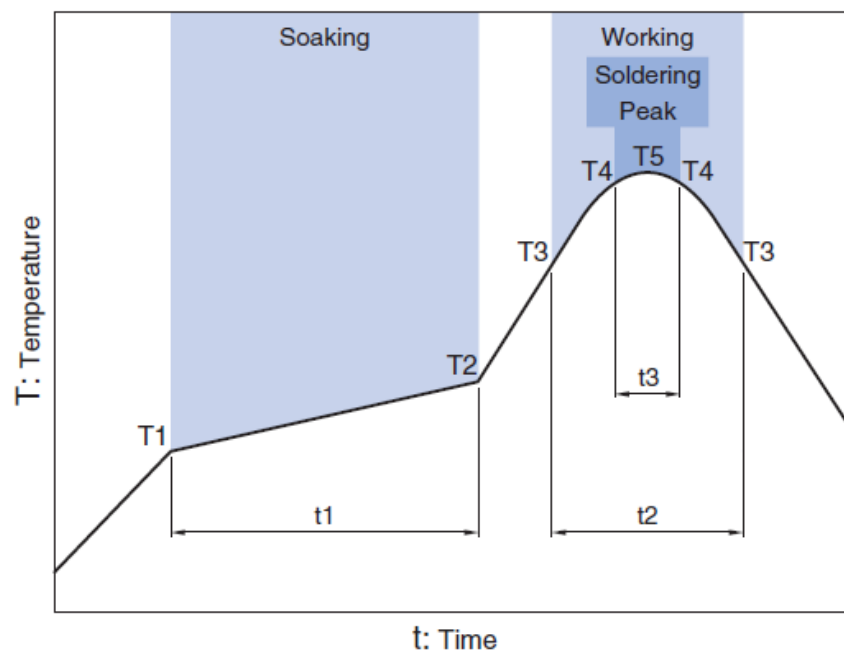
Taping Specification



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

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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