

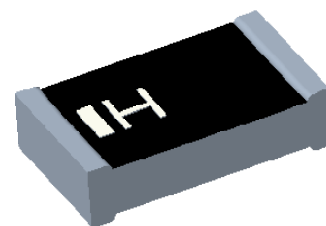
2.4GHz 2012Chip Antenna: ANT2012R240005KL2

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

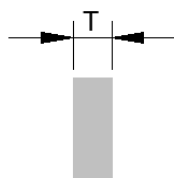
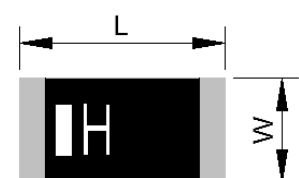
WorkingFrequencyRange	2400 ~2.484 MHz
Peak Gain	0.8dBi (Typ.)
Impedance	50 Ohm
VSWR	2.5(Max)
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Operation Temperature(°C)	-40 ~85°C

The specification is defined on HEK EVB.

Dimension and Terminal Configuration

Top

Side



Dimension (mm)	
L	2.00±0.15
W	1.20±0.15
T	0.60±0.10
D	0.20±0.15

No.	Terminal Name
1	Feeding
2	Ground

(1) (2)

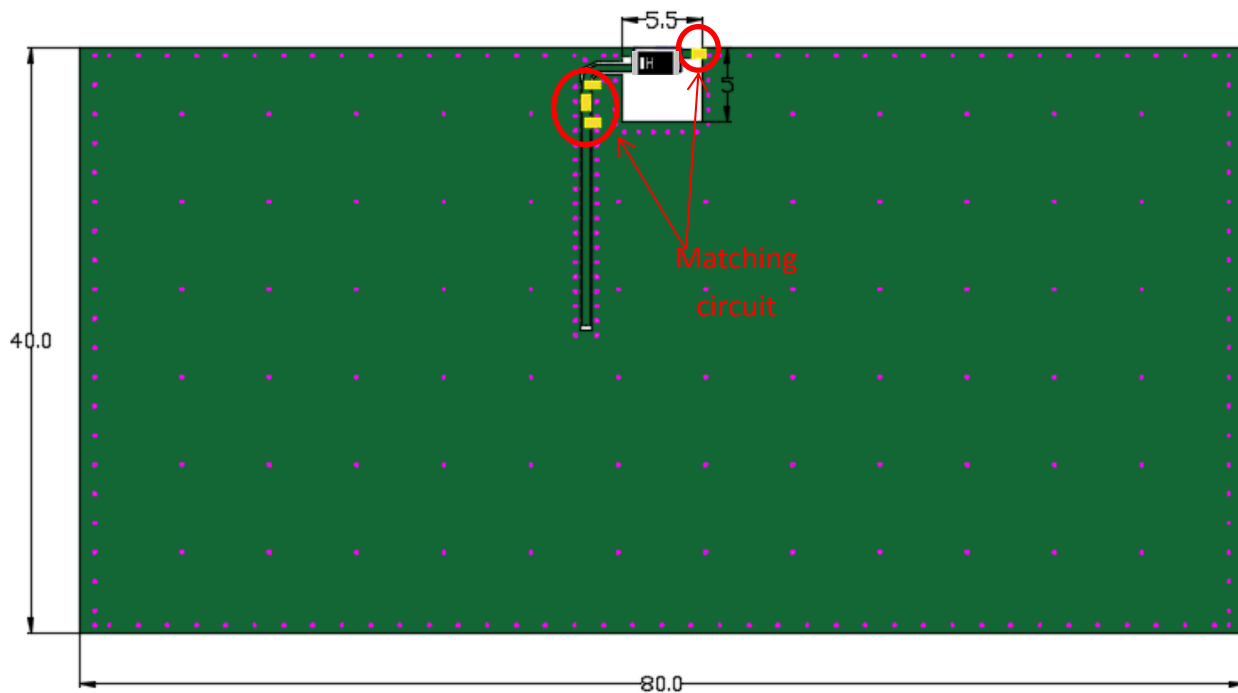


Bottom

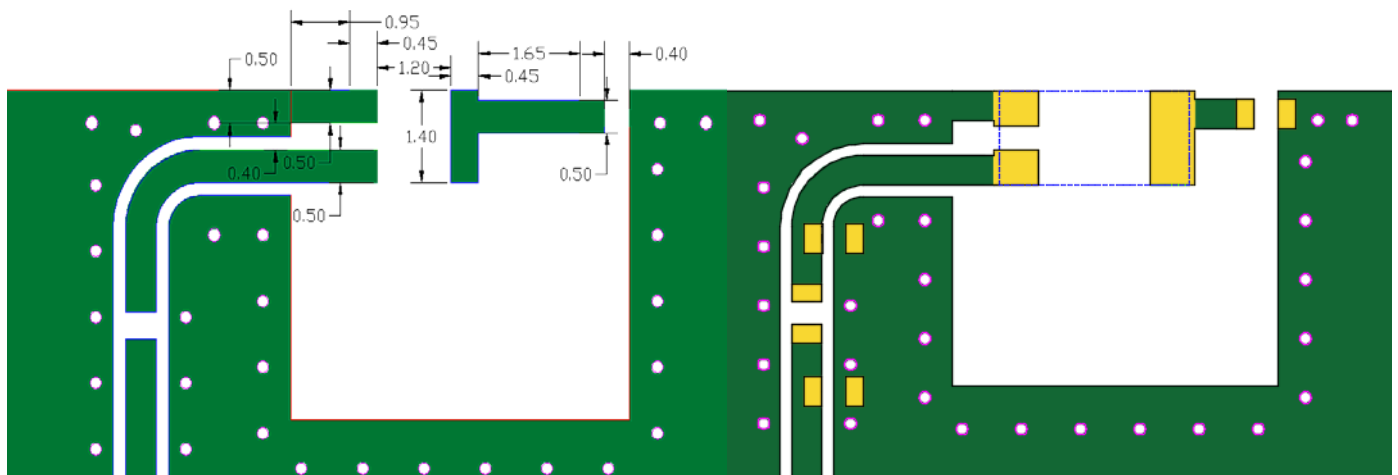
2.4GHz 2012Chip Antenna: ANT2012R240005KL2

Evaluation Board Reference

PCB Dimension



Antenna Layout Reference



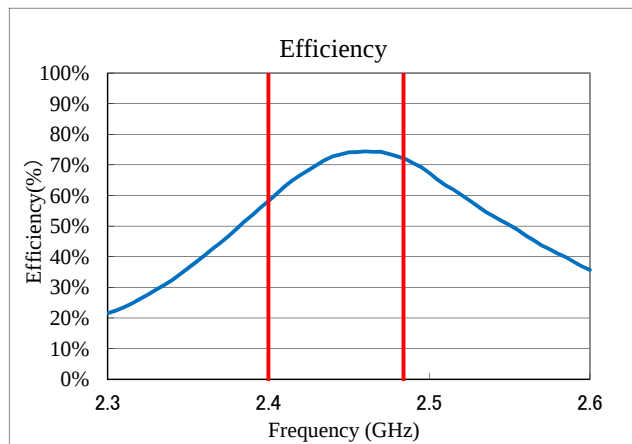
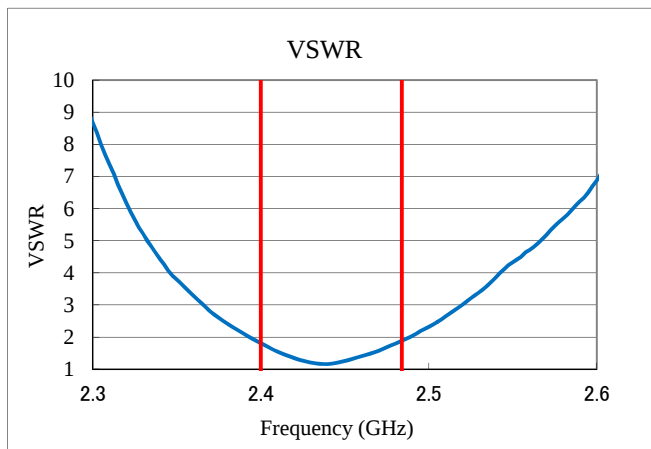
Unit : mm

 : Chip Antenna

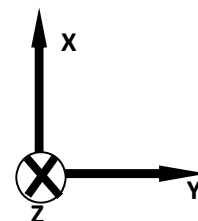
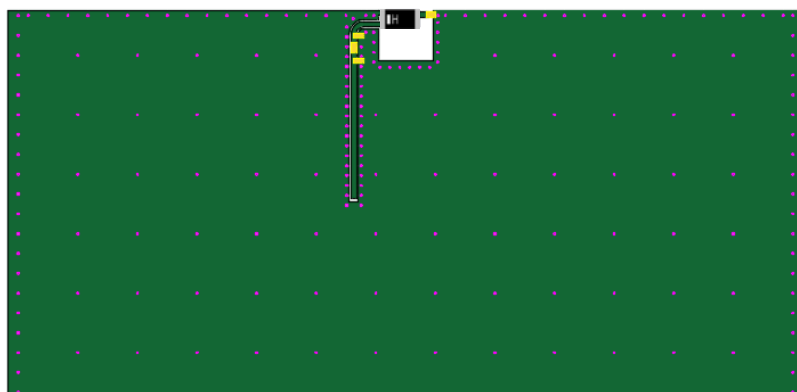
 : Land Pattern

Electrical Characteristics

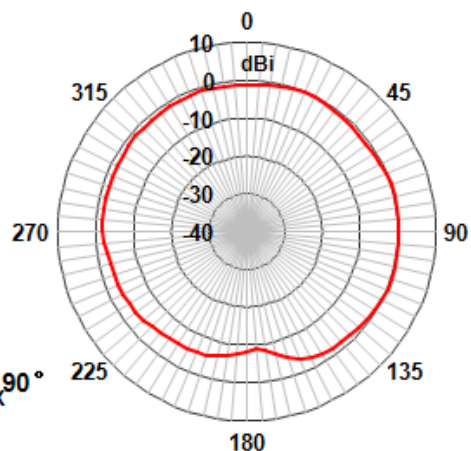
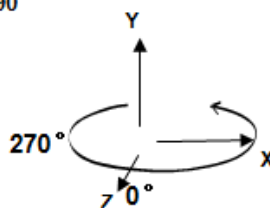
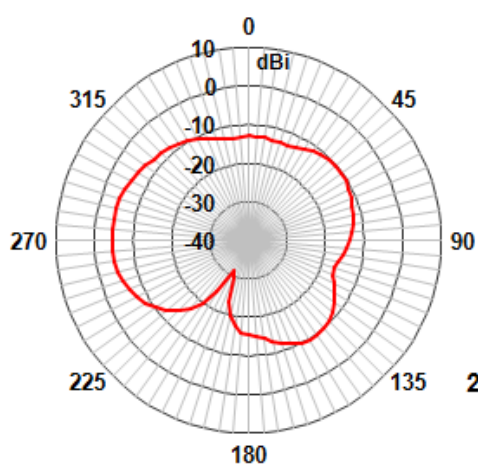
VSWR&Efficiency



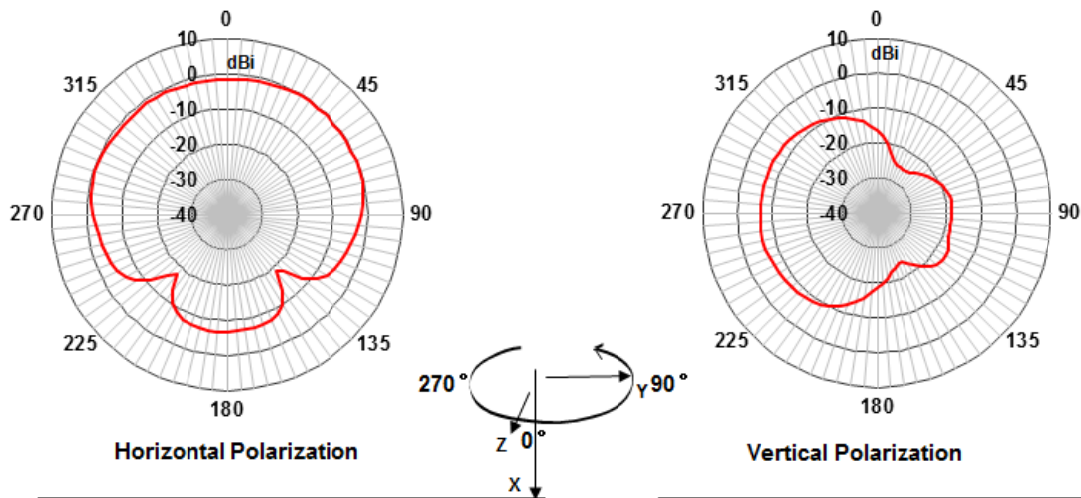
Radiation Pattern



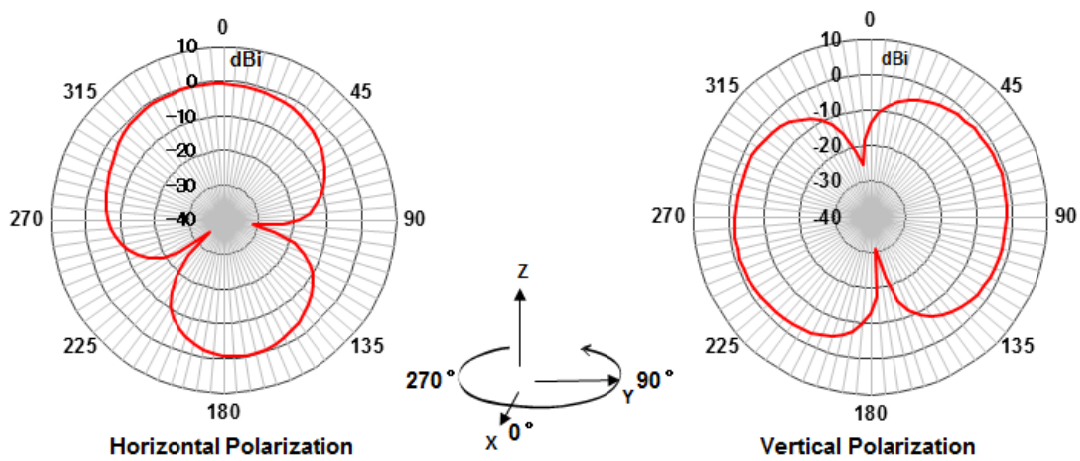
ZX-Plane



ZY-Plane



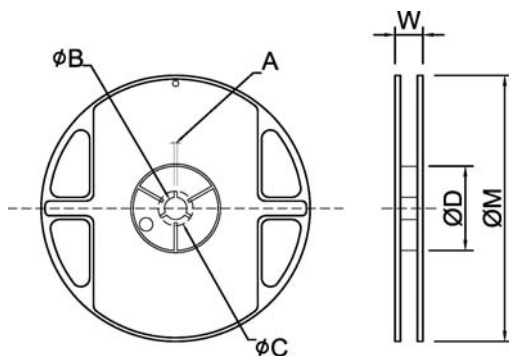
XY-Plane



Taping Specifications

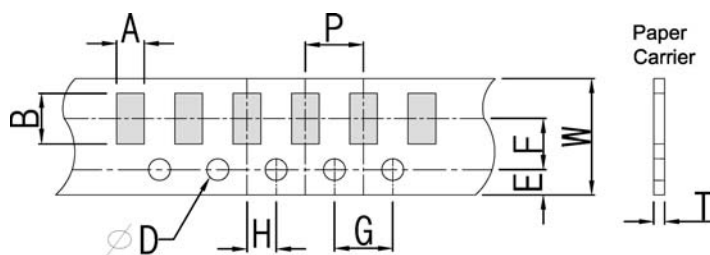
Reel and Taping Specification

Reel Specification



TYPE	SIZE		A	ϕB	ϕC	ϕD	W	ϕM
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

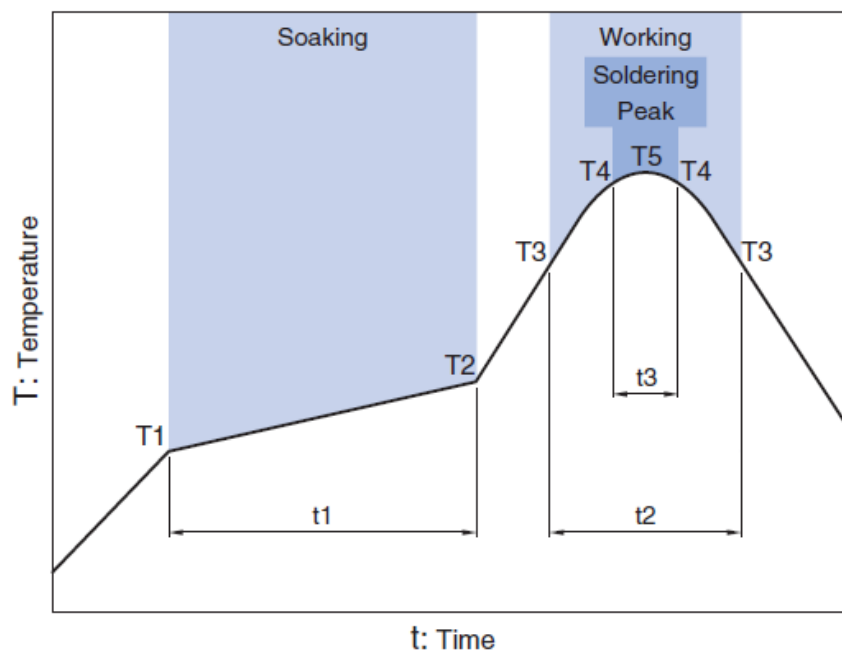
Taping Specification



Packaging	Type	A	B	W	E	F	G	H	T	ϕD	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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