

2.4GHz 8010 Chip Antenna: ANT8010R24003KM1**Applications:**

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

Features

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

**Part number**

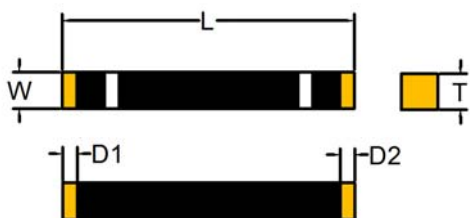
ANT 8010 R 2400 3K M1
 (1) (2) (3) (4) (5)

(1) Size Code	8.0x1.0mm
(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	1.5 dBi (Typ.)
Impedance	50 Ohm
VSWR	2.5 (Max)
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Operation Temperature(℃)	-40~85

The specification is defined on EVB.

Dimension and Terminal Configuration

Dimension (mm)	
L	8.10+/-0.15
W	1.00+/-0.15
T	1.00+/-0.10
D1	0.40+/-0.15
D2	0.40+/-0.15

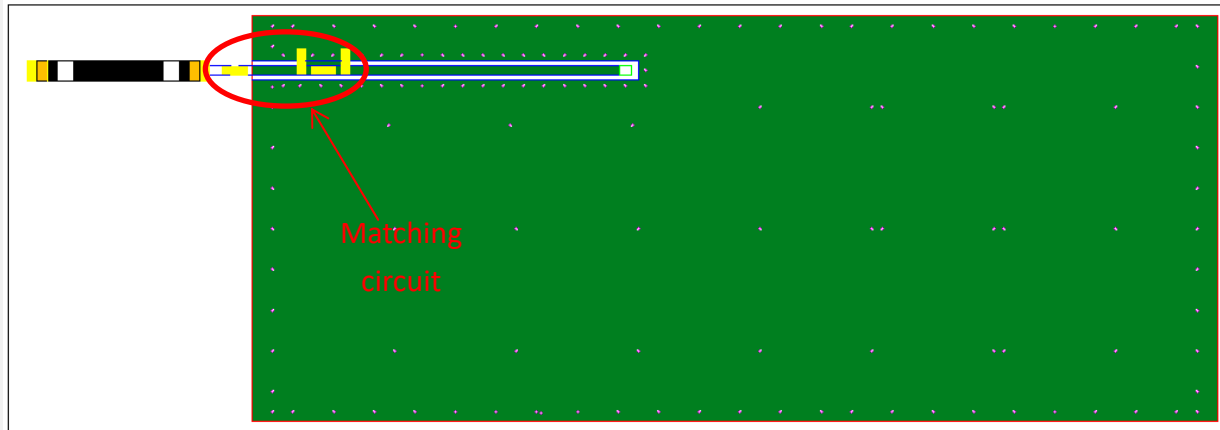
No.	Terminal Name
1	Feeding
2	Soldering

Dongguan Hekang Electronics Co., LTD

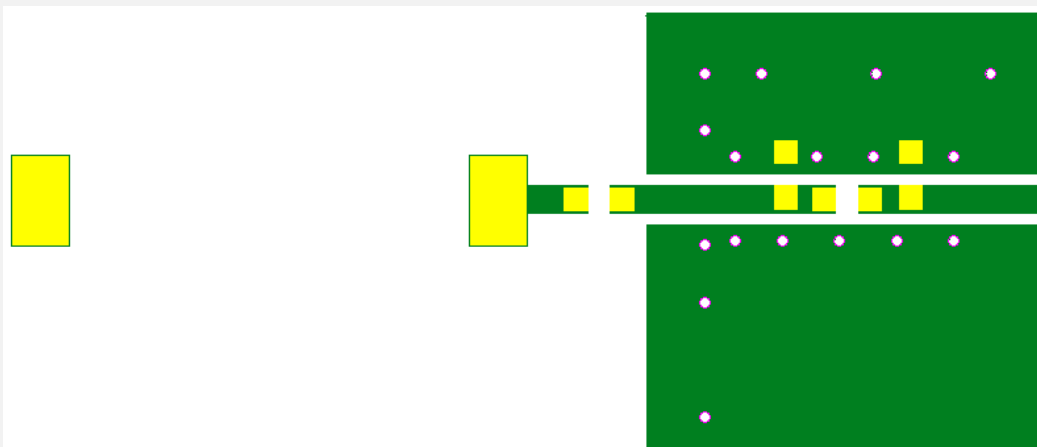
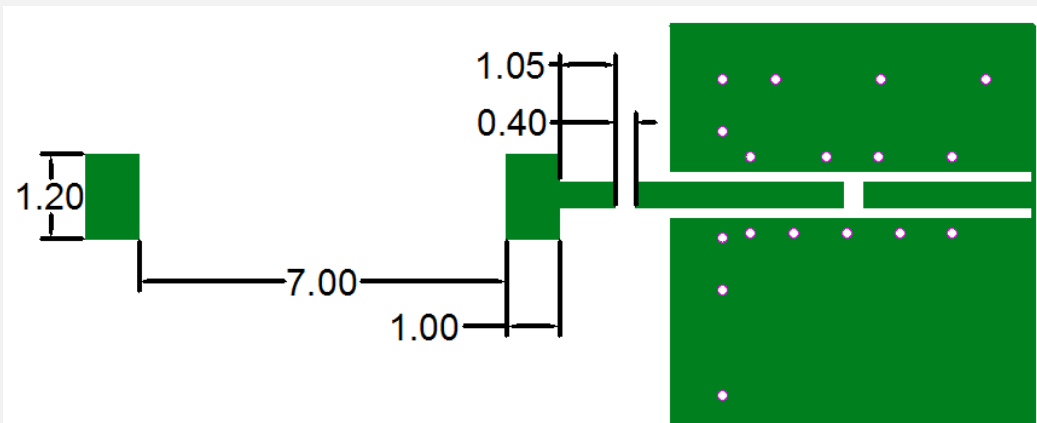
Room 101, Building 10, No. 24, Changping Tangjiao Road, Changping Town, Dongguan City, Guangdong Province

Evaluation Board Reference

PCB Dimension



Antenna Layout Reference



Unit : mm

 : Chip Antenna

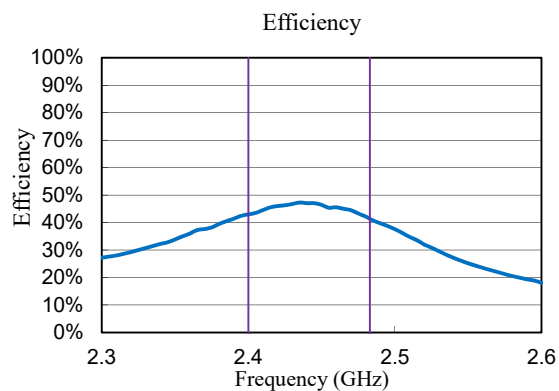
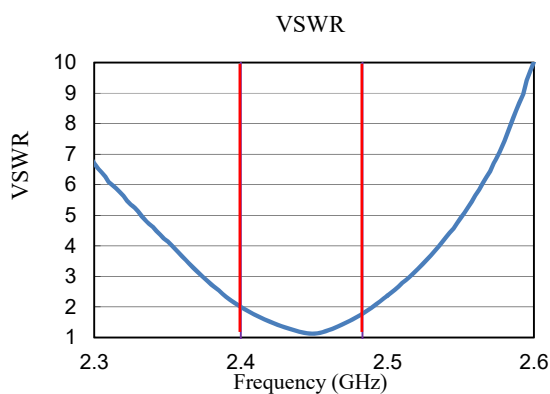
 : Land Pattern

2.4GHz 8010 Chip Antenna: ANT8010R24003KM1

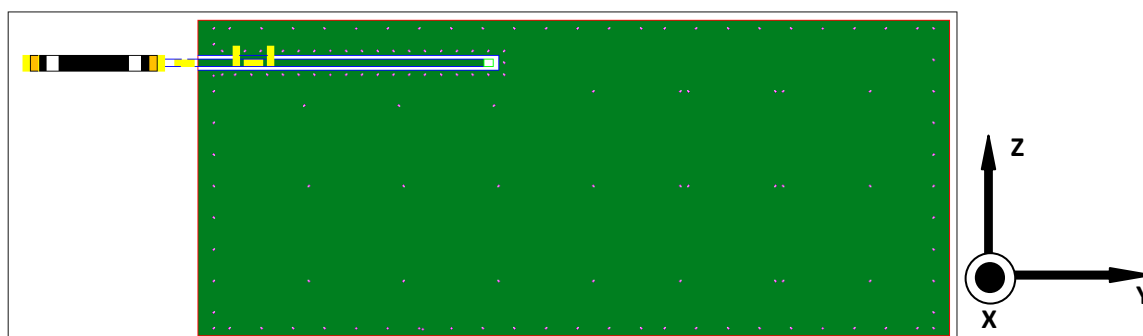
Electrical Characteristics

Return Loss & Radiation

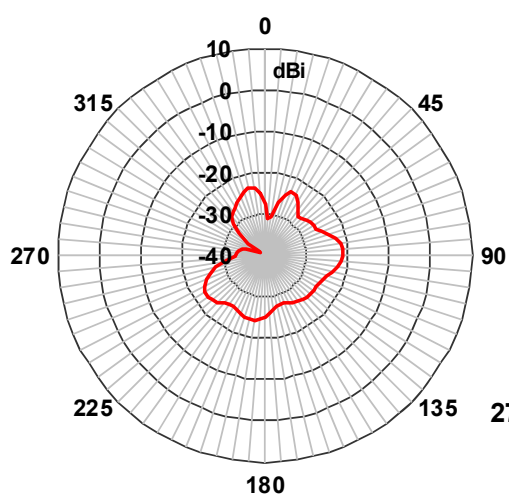
VSWR&Efficiency



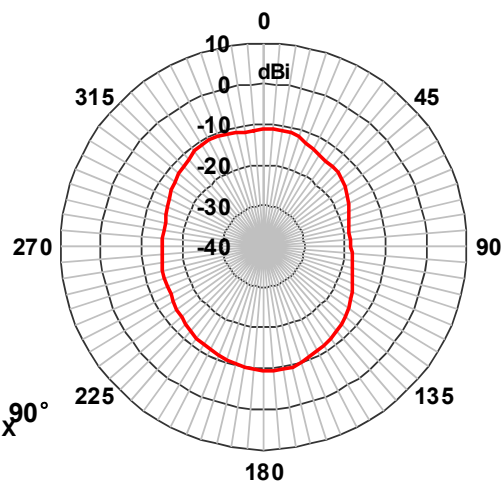
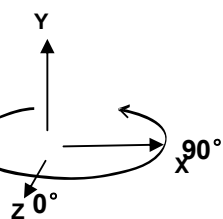
Radiation Pattern



ZX-Plane

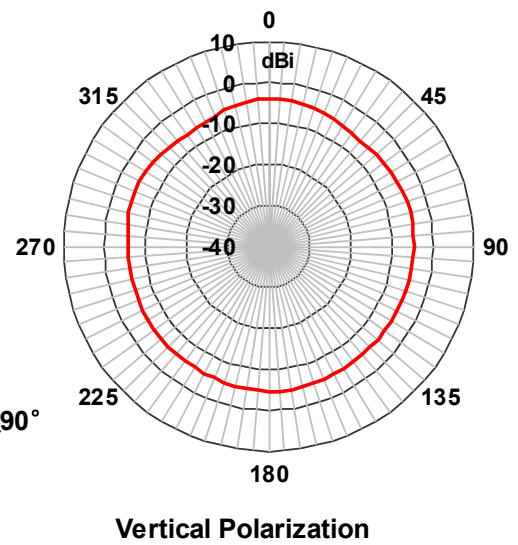
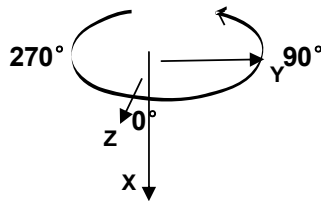
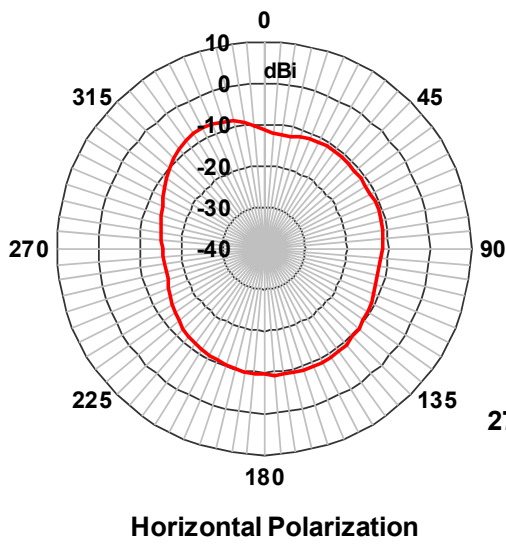


Horizontal Polarization

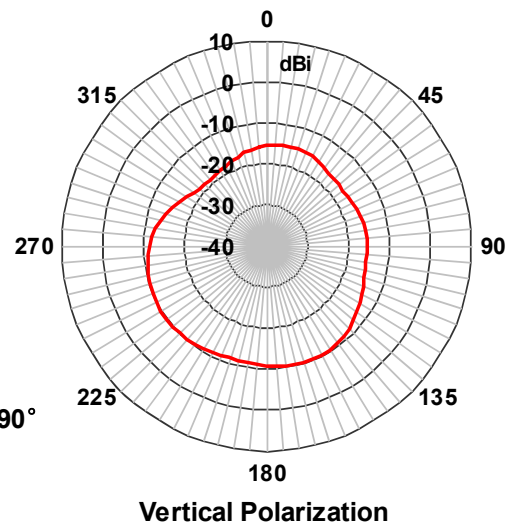
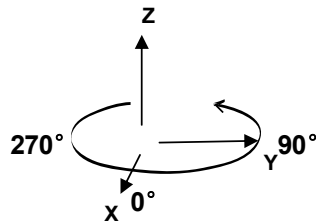
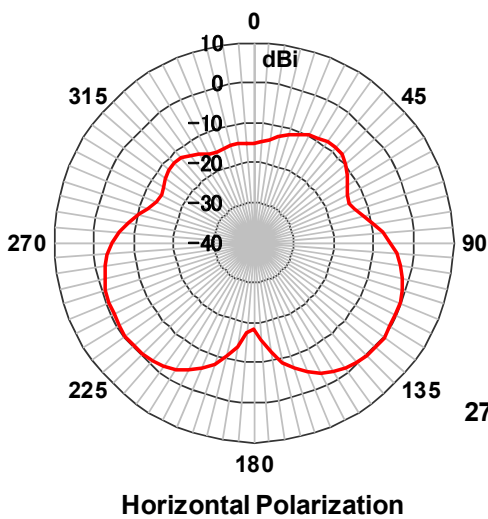


Vertical Polarization

ZY-Plane



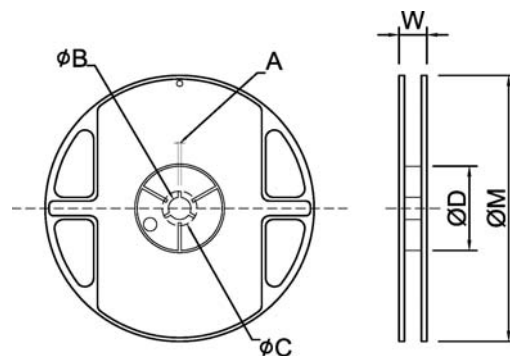
XY-Plane



Taping Specifications

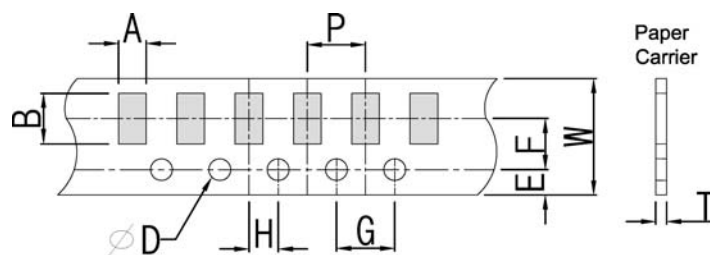
Reel and Taping Specification

Reel Specification



TYPE	SIZE		A	ψB	ψC	ψD	W	ψM
8010	7"	3K/Reel	5.5 $\pm$ 0.5	13.5 $\pm$ 1.0	16.5 $\pm$ 1.0	55 $\pm$ 1.0	18.5 $\pm$ 2.0	178 $\pm$ 2.0

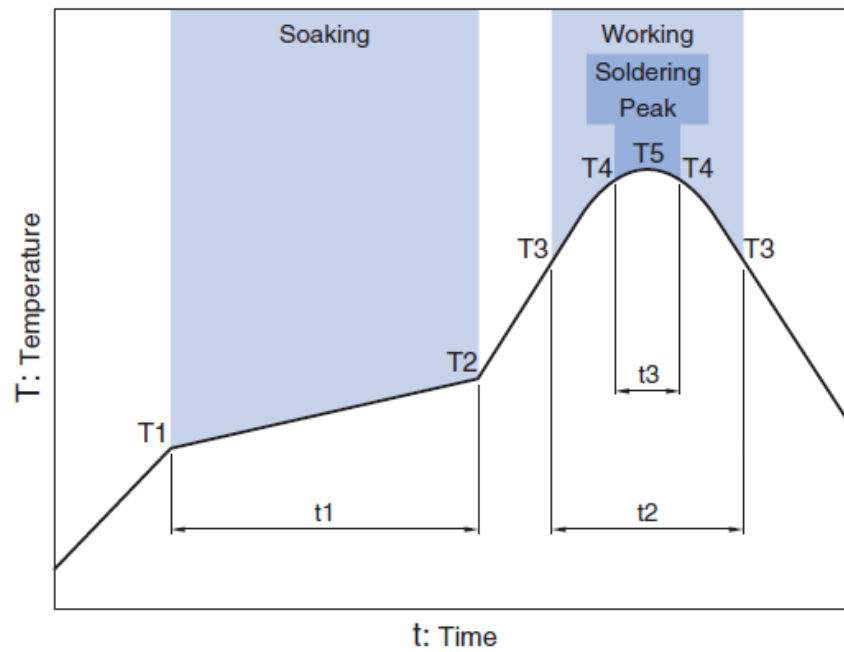
Taping Specification



Packaging	Type	A	B	W	E	F	G	H	T	ψD	P
Paper Type	8010	1.30 $\pm$ 0.20	8.30 $\pm$ 0.20	16.0 $\pm$ 0.20	1.50 $\pm$ 0.10	7.5 $\pm$ 0.10	3.85 $\pm$ 0.10	1.65 $\pm$ 0.05	1.5 $\pm$ 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.

Sept. 2022 Ver.H01