

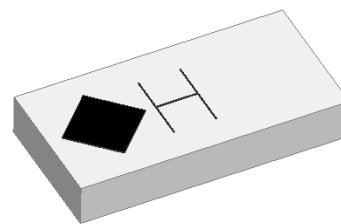
2.4/5GHz 3216 Chip Antenna: ANT3216R24503KL1

Applications:

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

Features

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



Part number

ANT 3216 R 2450 3K L1
(1) (2) (3) (4) (5)

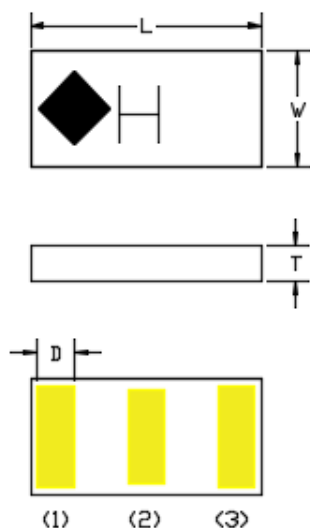
(1) Size Code	3.2x1.6mm
(2) Packing	Tape and reel
(3) Frequency	2.4GHz/5GHz
(4) Packing Number	3K
(5) Code	L1

Electrical Specification

Working Frequency Range	2400 ~2.484 MHz 5150~5850 MHz
Peak Gain	2.8 dBi (Typ.) 5.3 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



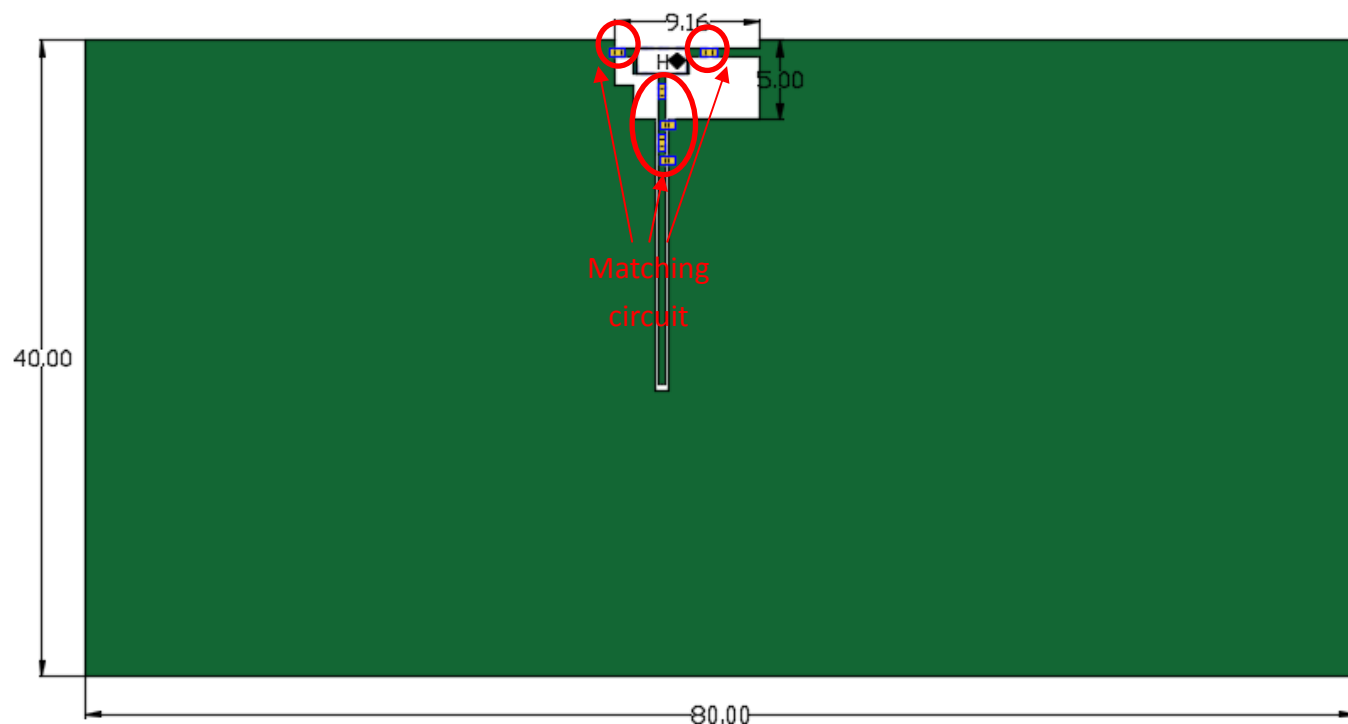
Dimension (mm)	
L	3.20±0.15
W	1.60±0.15
T	0.55±0.10
D	0.50±0.15

No.	Terminal Name
1	Ground
2	Feeding
3	Ground

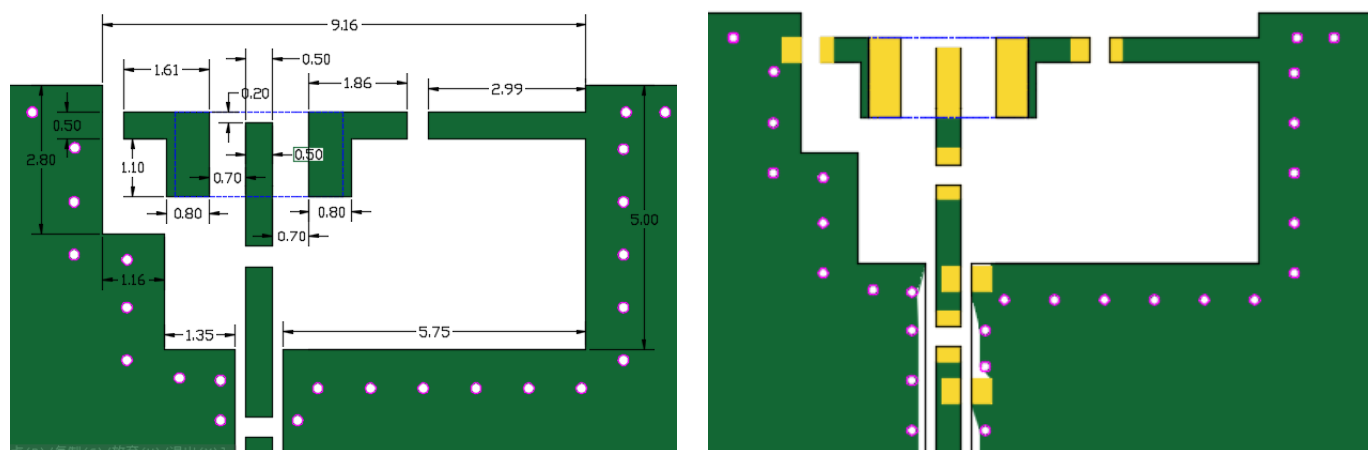
2.4/5GHz 3216 Chip Antenna: ANT3216R24503KL1

Evaluation Board Reference

PCB Dimension



Antenna Layout Reference



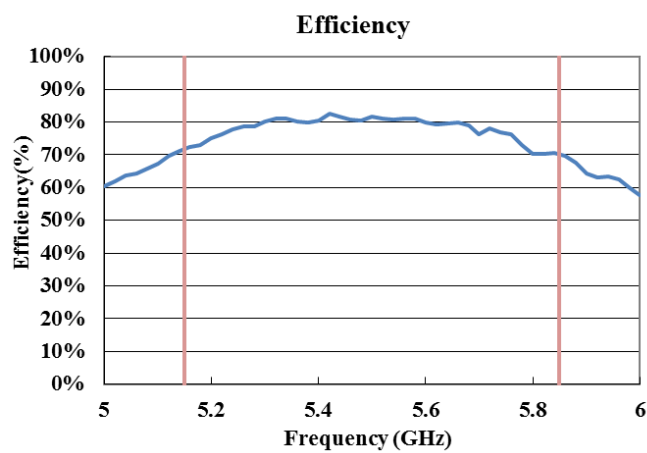
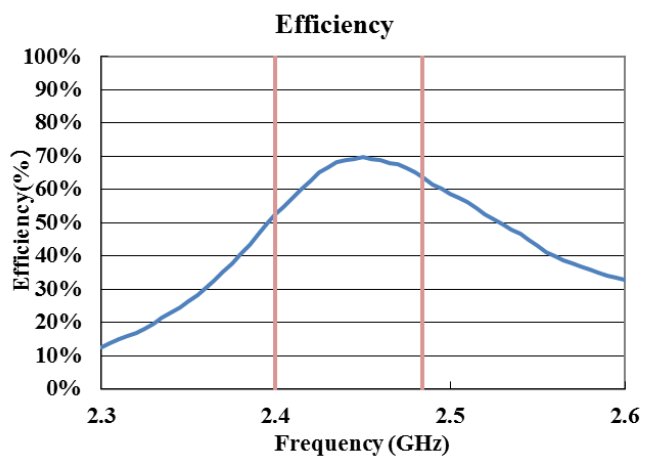
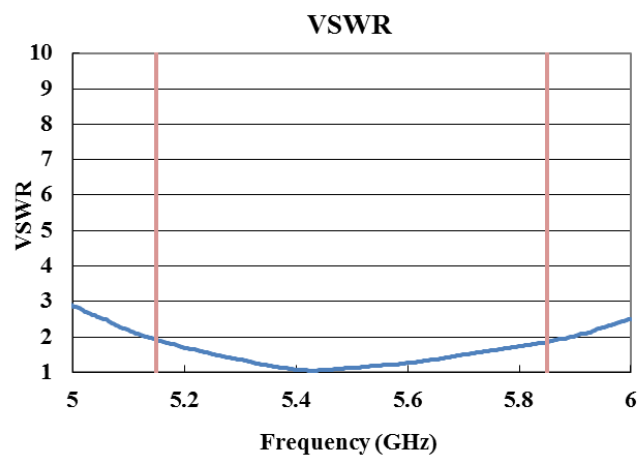
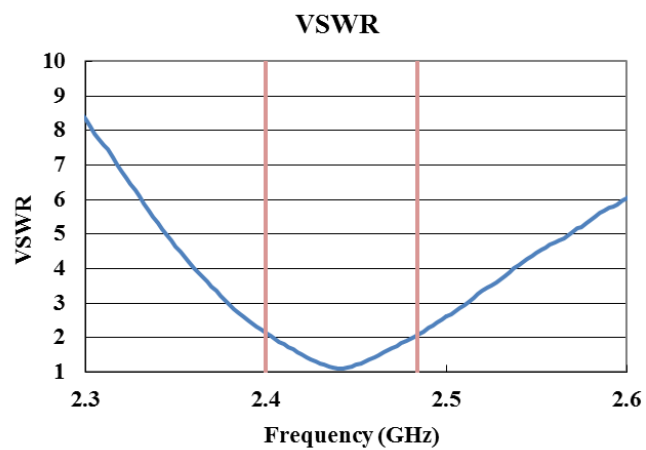
Unit : mm

 Chip Antenna

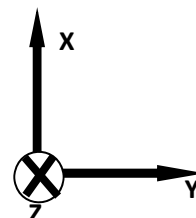
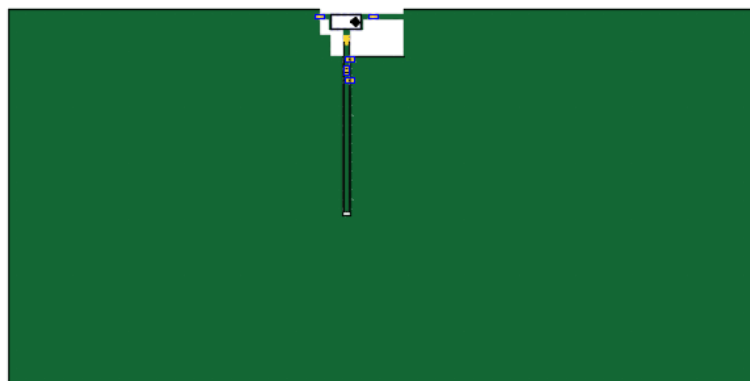
 Land Pattern

2.4/5GHz 3216 Chip Antenna: ANT3216R24503KL1

VSWR&Efficiency



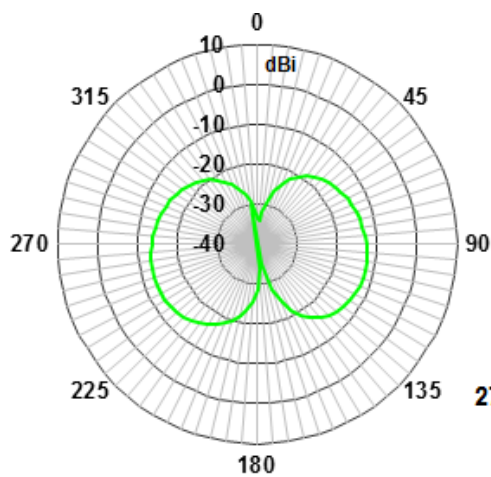
Radiation Pattern



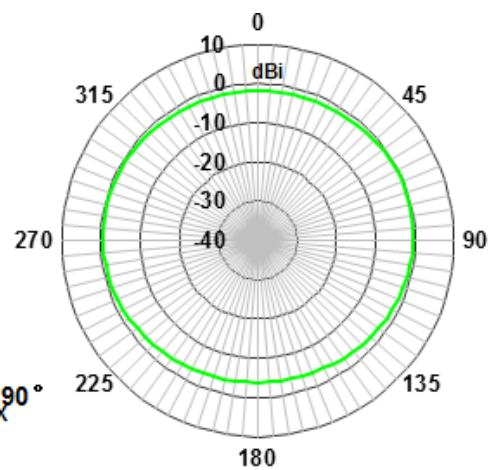
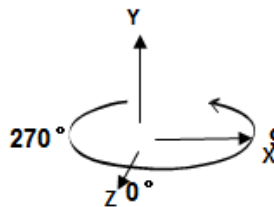
2.4/5GHz 3216 Chip Antenna: ANT3216R24503KL1

Frequency=2440MHz

ZX-Plane

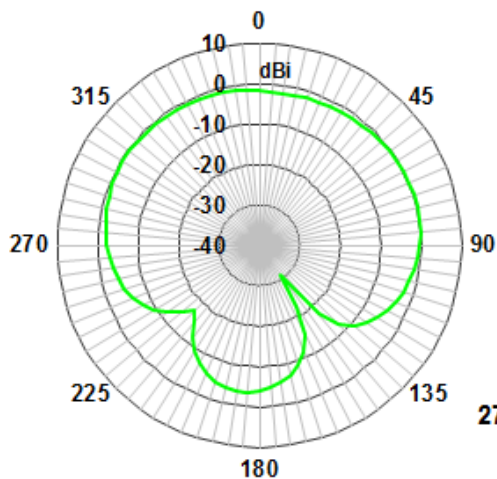


Horizontal Polarization

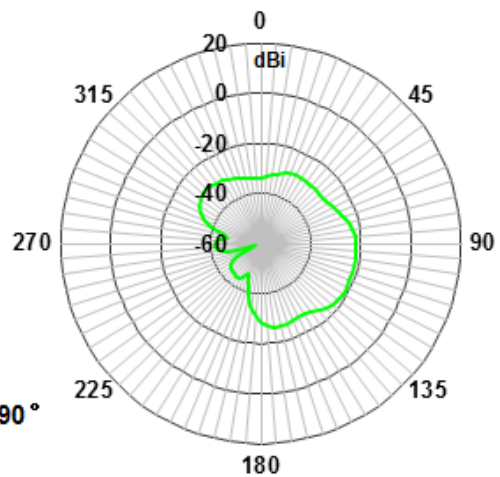
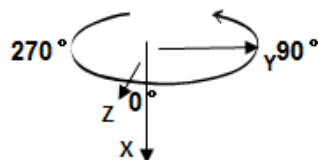


Vertical Polarization

ZY-Plane

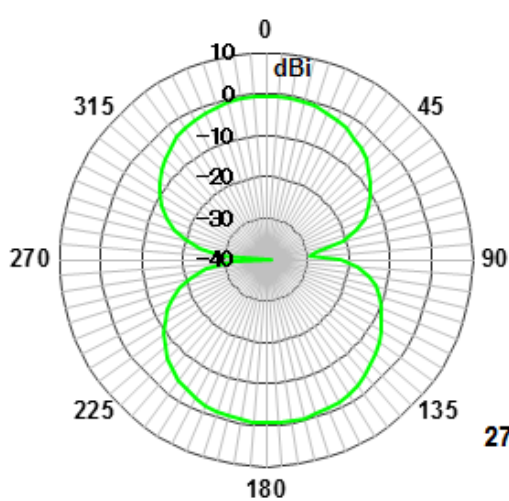


Horizontal Polarization

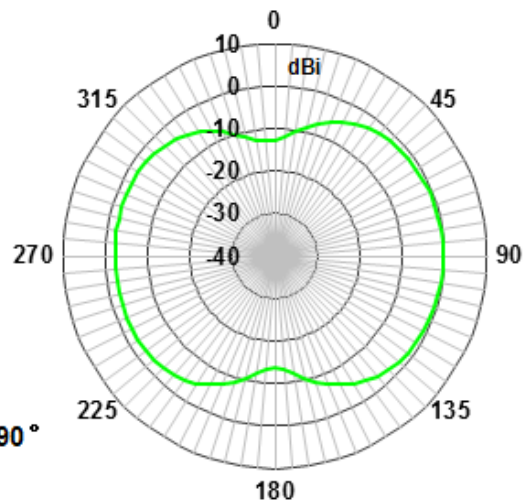
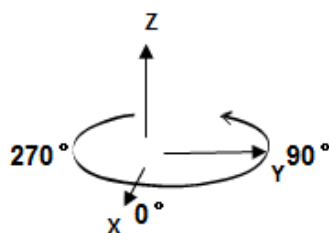


Vertical Polarization

XY-Plane



Horizontal Polarization

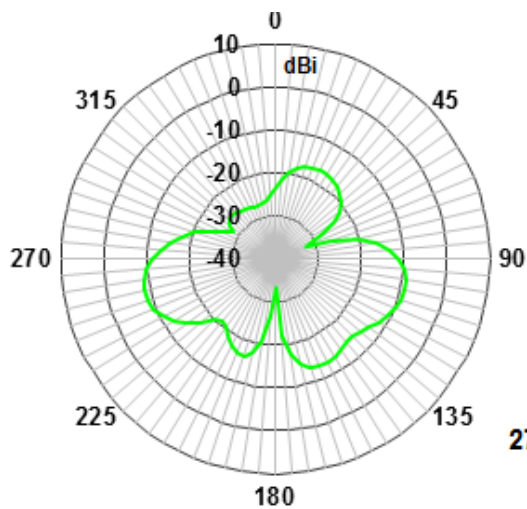


Vertical Polarization

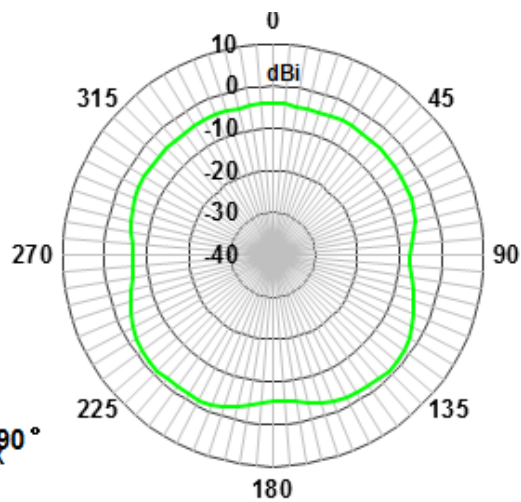
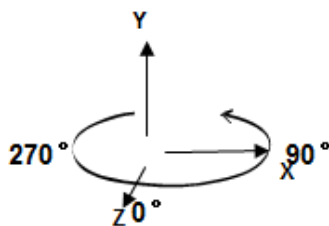
2.4/5GHz 3216 Chip Antenna: ANT3216R24503KL1

Frequency=5500MHz

ZX-Plane

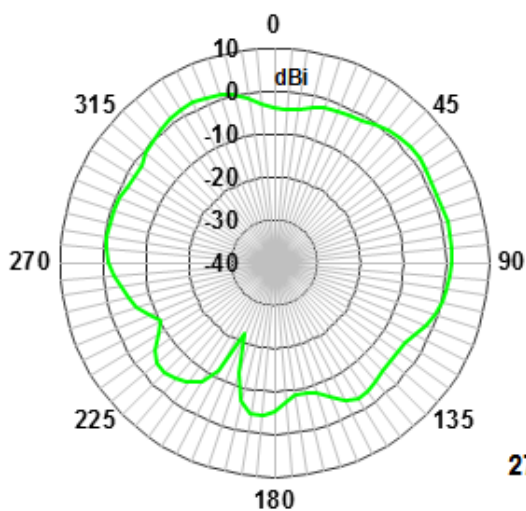


Horizontal Polarization

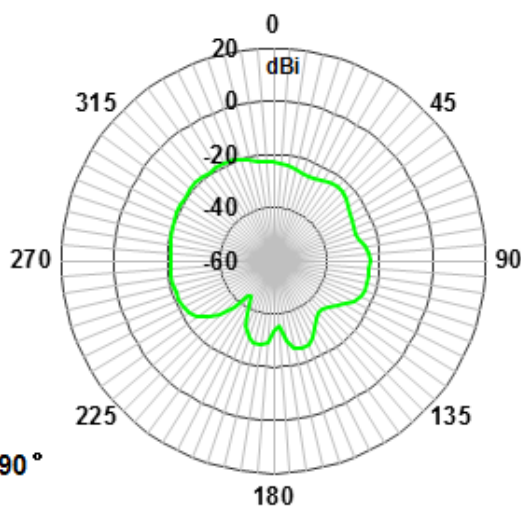
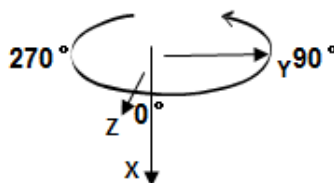


Vertical Polarization

ZY-Plane

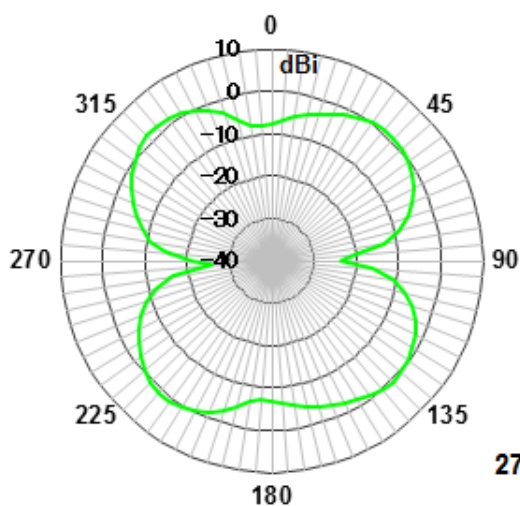


Horizontal Polarization

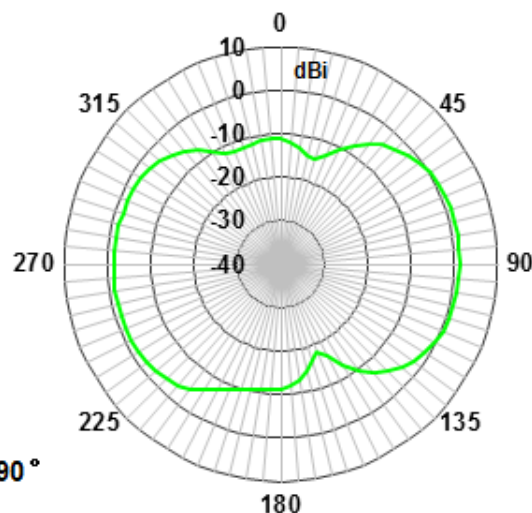
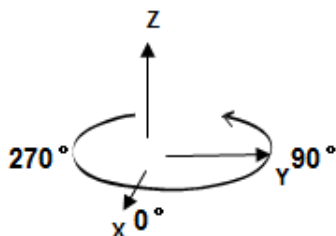


Vertical Polarization

XY-Plane



Horizontal Polarization



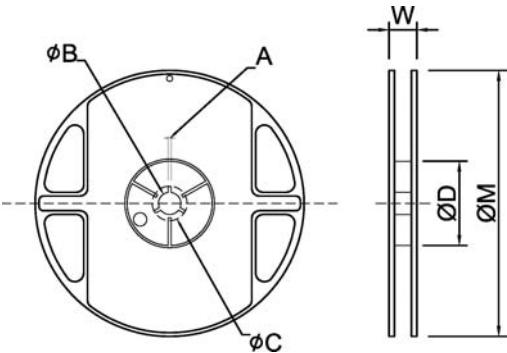
Vertical Polarization

2.4/5GHz 3216 Chip Antenna: ANT3216R24503KL1

Taping Specifications

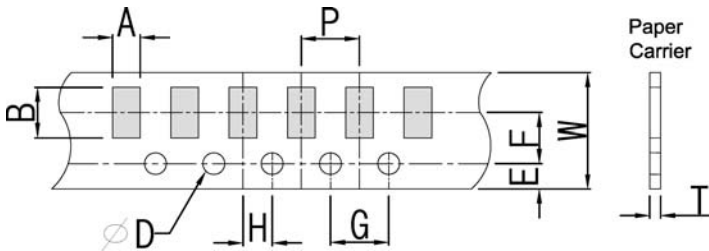
Reel and Taping Specification

Reel Specification



TYPE	SIZE		A	ϕB	ϕC	ϕD	W	ϕM
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

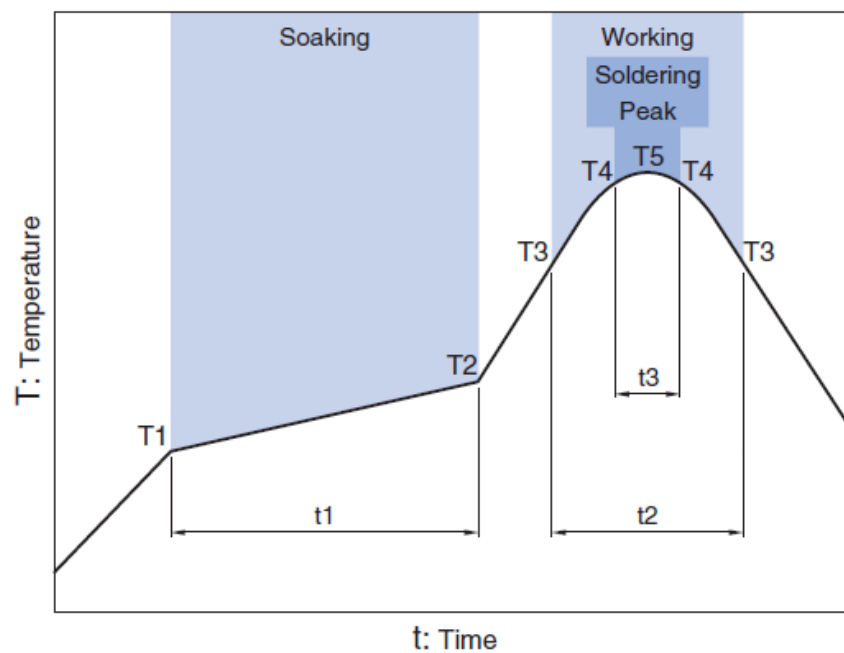


Packaging	Type	A	B	W	E	F	G	H	T	ϕD	P
Paper Type	3216	1.90±0.20	3.50±0.20	8.0±0.20	1.75±0.10	3.5±0.05	4.0±0.10	2.0±0.05	0.75±0.10	1.50 ^{+0.10} ₋₀	4.0±0.1

2.4/5GHz 3216 Chip Antenna: ANT3216R24503KL1

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.