

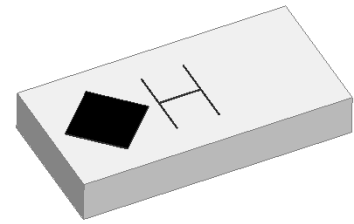
2.4/5GHz 3216 Chip Antenna: ANT3216R24503KL1

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)

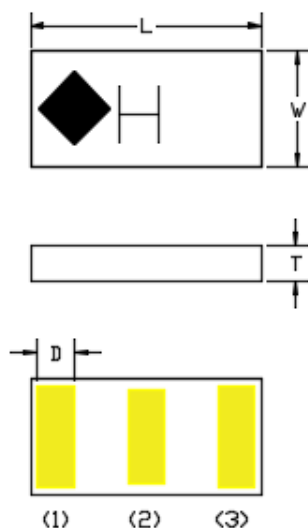
(1) Size Code	3.2x1.6mm
(2) Packing	Tape and reel
(3) Frequency	2.4GHz/5GHz
(4) Packing Number	3K
(5) Code	L1

Electrical Specification

Working Frequency Range	2402MHz	2440MHz	2480MHz
Peak Gain	2.8 dBi	2.7 dBi	2.75 dBi
Directivity	3.1 dBi	3.18 dBi	2.98 dBi
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



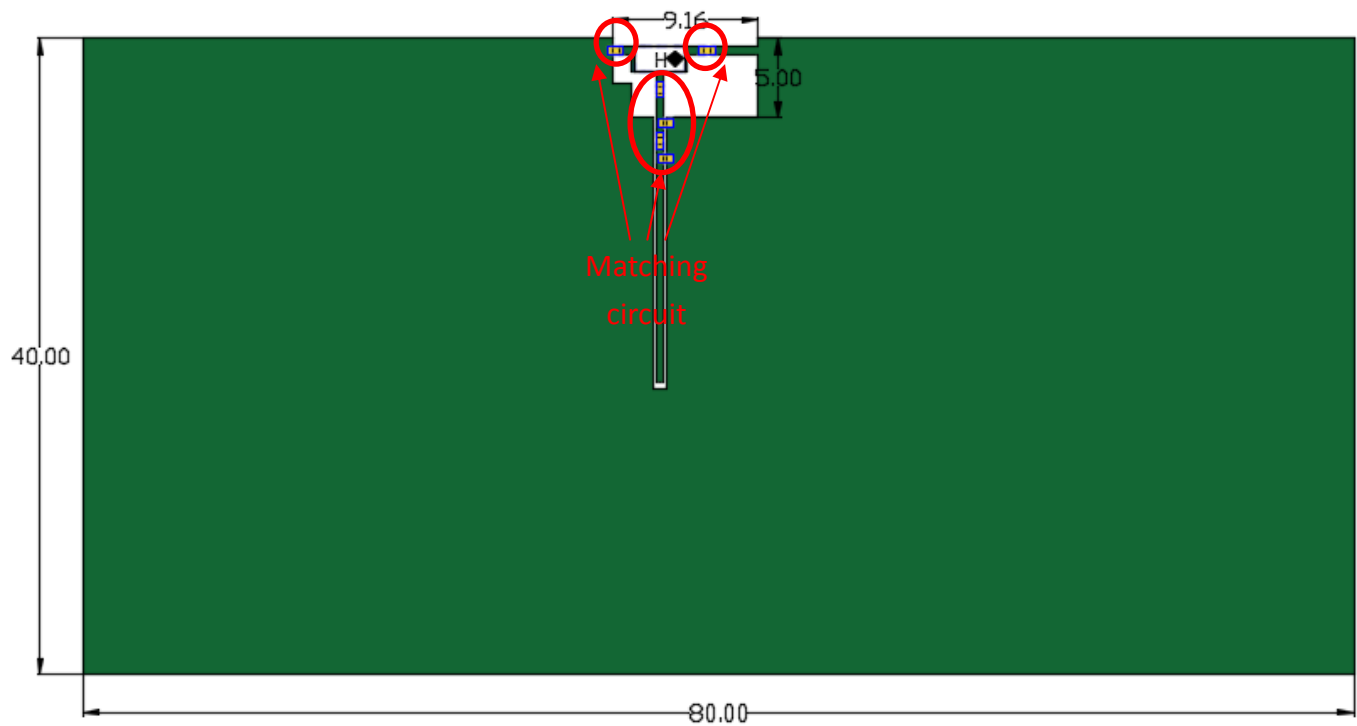
Dimension (mm)	
L	3.20±0.15
W	1.60±0.15
T	0.55±0.10
D	0.50±0.15

No.	Terminal Name
1	Ground
2	Feeding
3	Ground

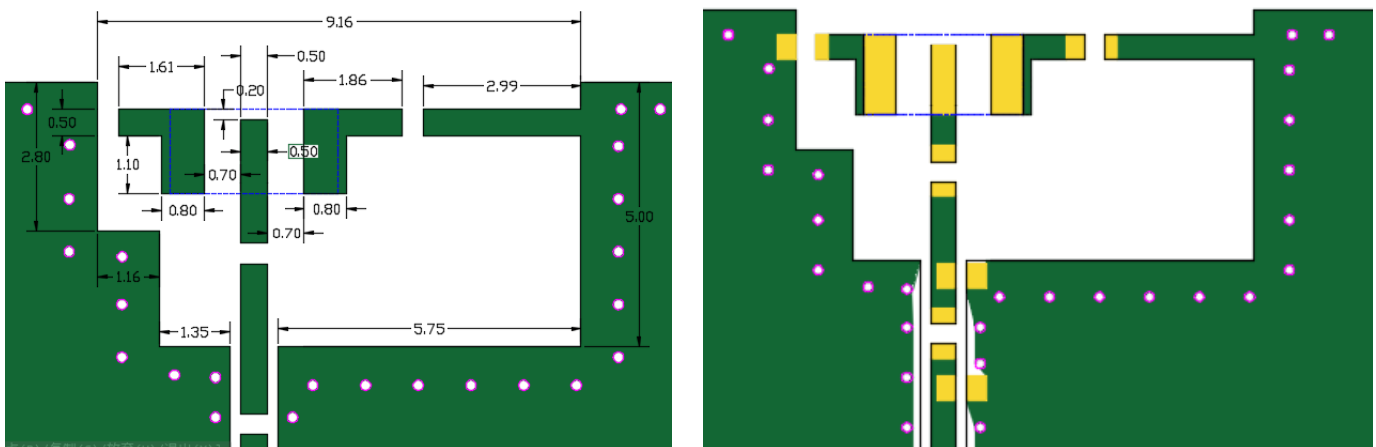
2.4/5GHz 3216 Chip Antenna: ANT3216R24503KL1

Evaluation Board Reference

PCB Dimension



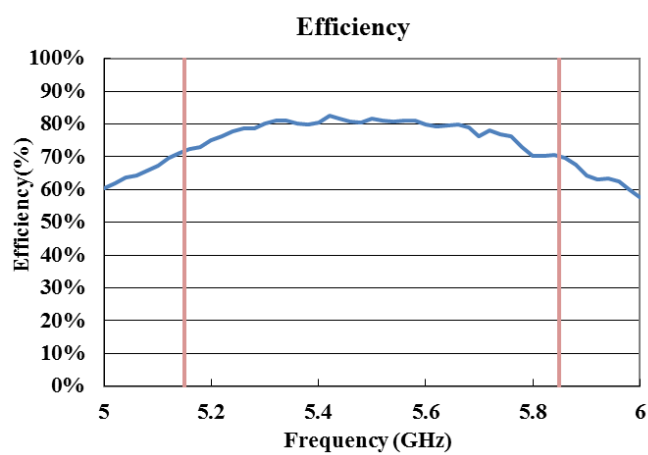
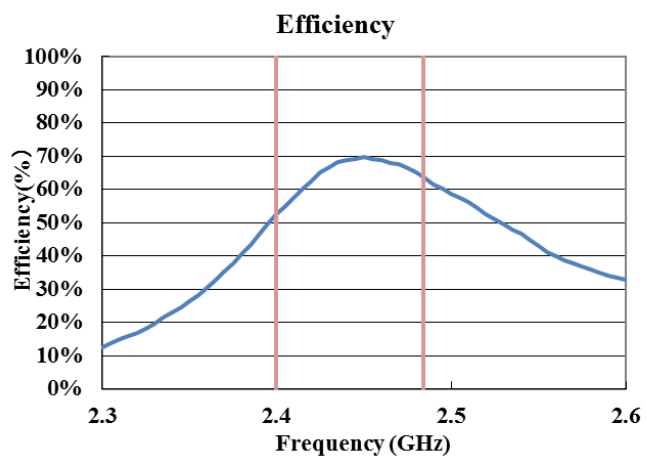
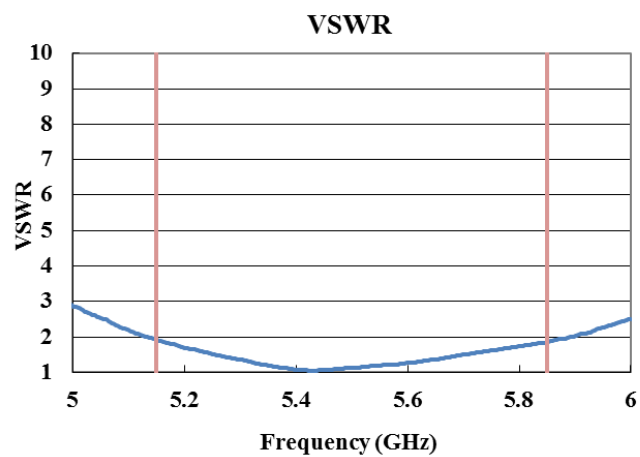
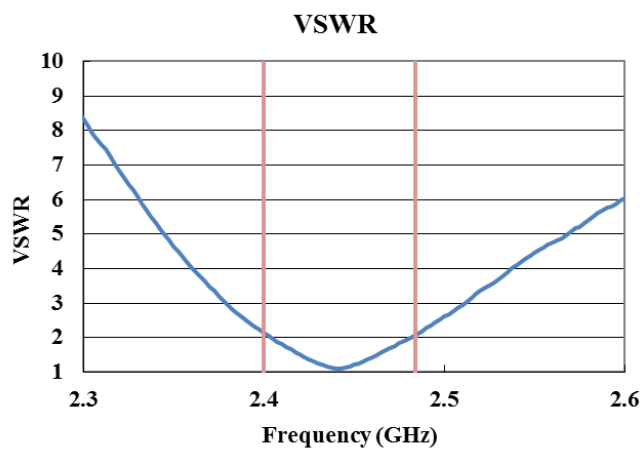
Antenna Layout Reference



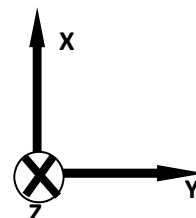
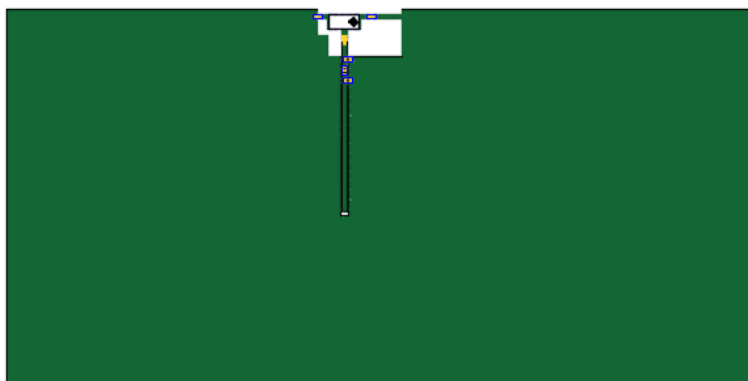
Unit : mm

-  Chip Antenna
-  Land Pattern

VSWR&Efficiency



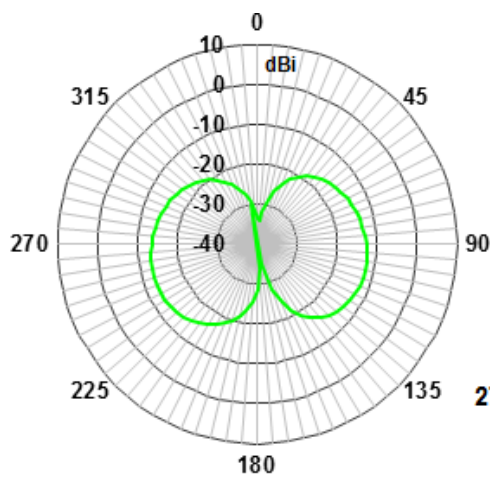
Radiation Pattern



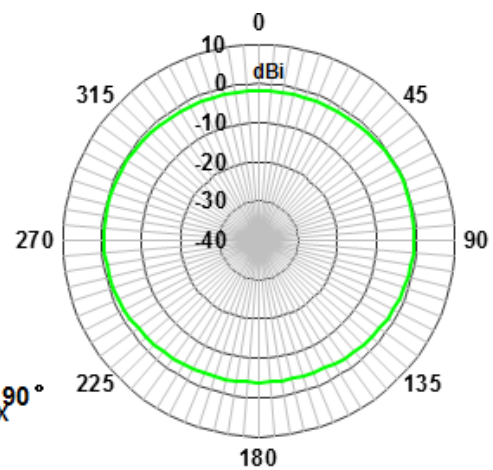
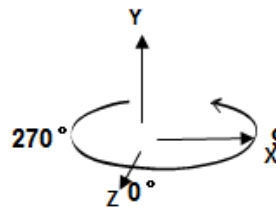
2.4/5GHz 3216 Chip Antenna: ANT3216R24503KL1

Frequency=2440MHz

ZX-Plane

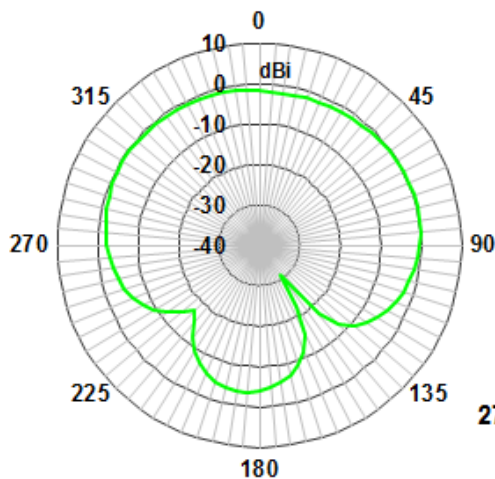


Horizontal Polarization

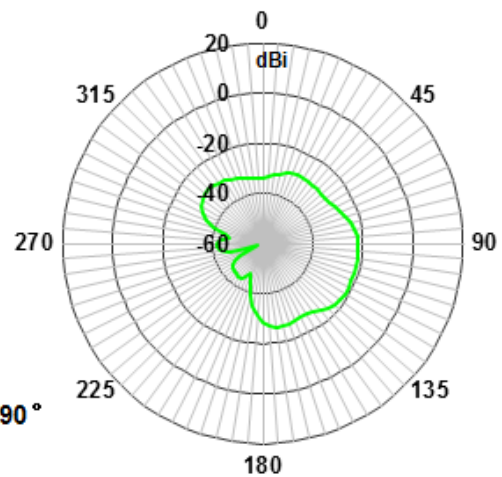
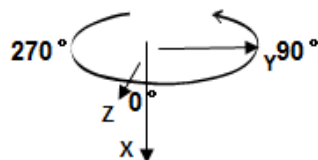


Vertical Polarization

ZY-Plane

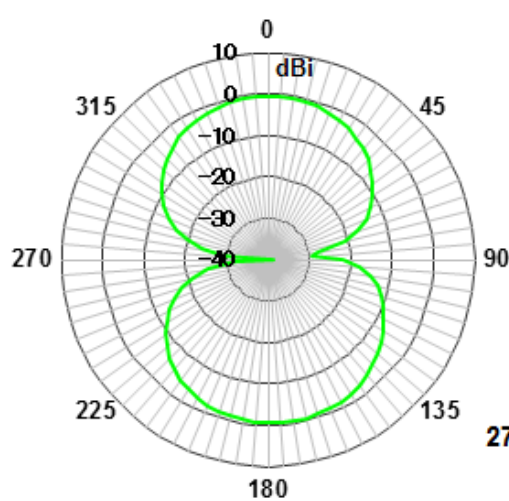


Horizontal Polarization

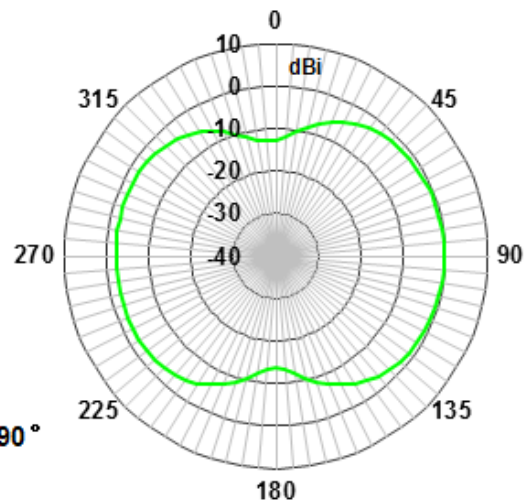
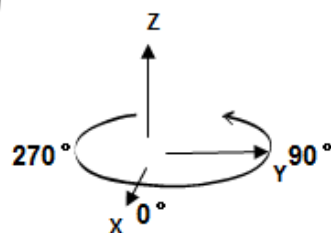


Vertical Polarization

XY-Plane



Horizontal Polarization

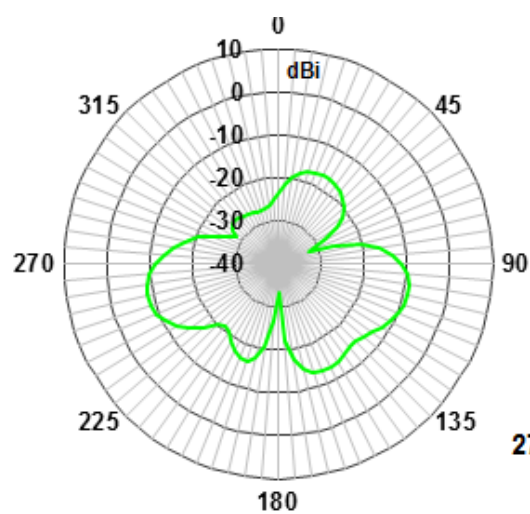


Vertical Polarization

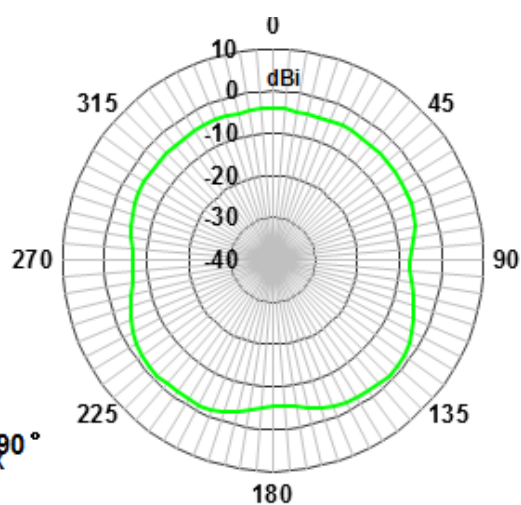
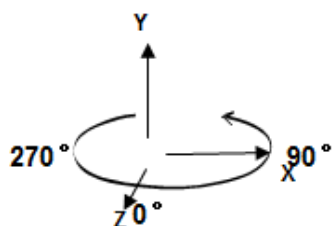
2.4/5GHz 3216 Chip Antenna: ANT3216R24503KL1

Frequency=5500MHz

ZX-Plane

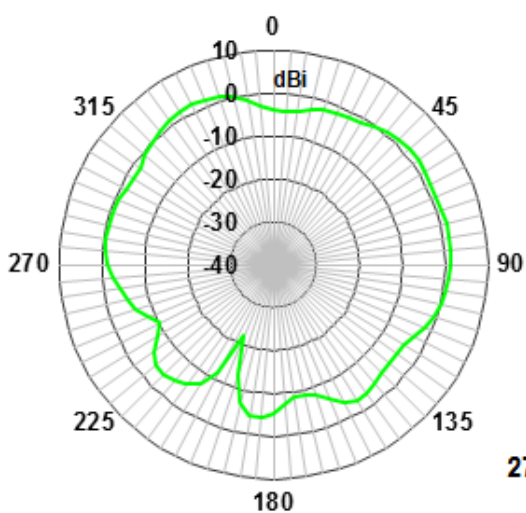


Horizontal Polarization

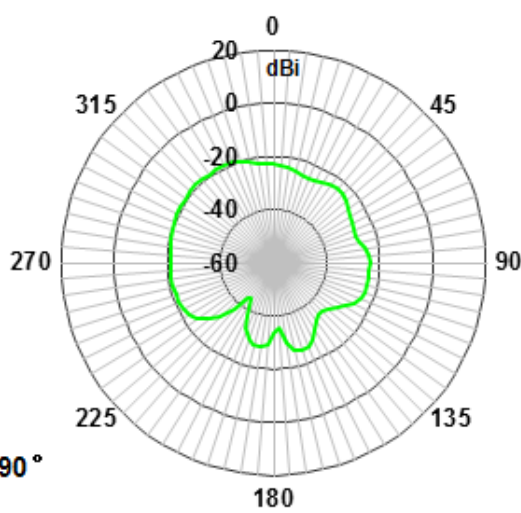
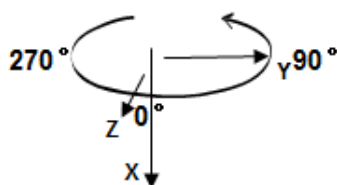


Vertical Polarization

ZY-Plane

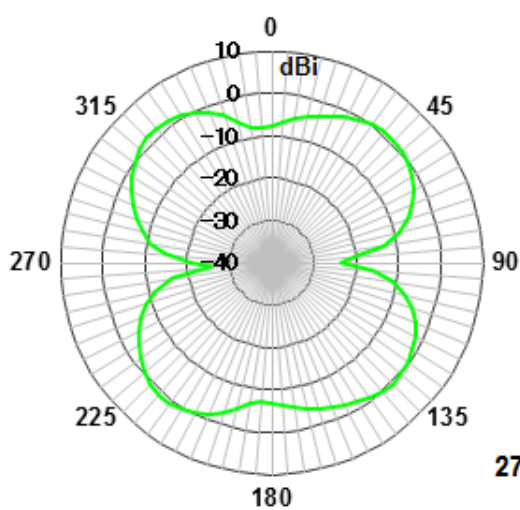


Horizontal Polarization

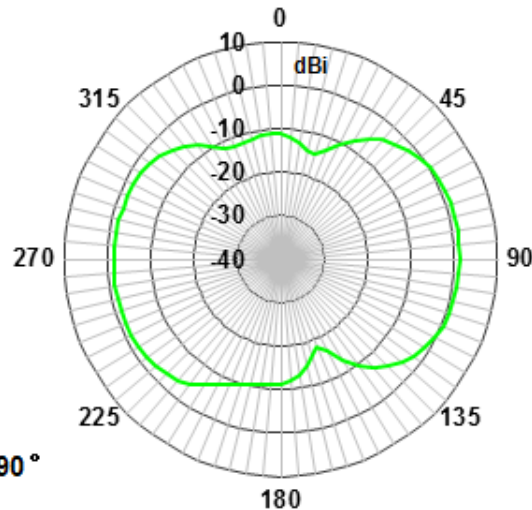
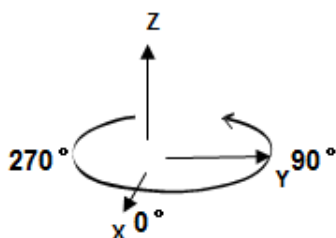


Vertical Polarization

XY-Plane



Horizontal Polarization



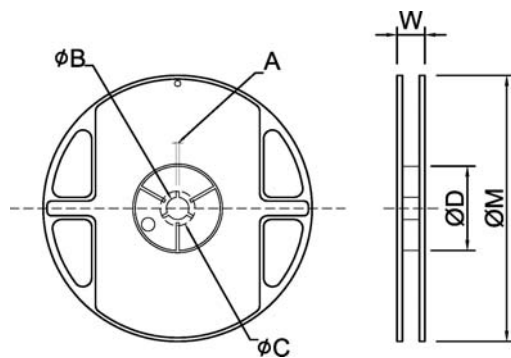
Vertical Polarization

2.4/5GHz 3216 Chip Antenna: ANT3216R24503KL1

Taping Specifications

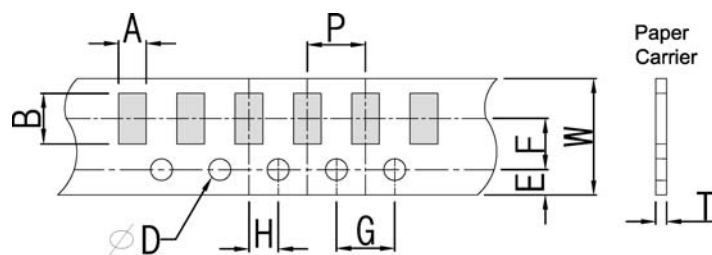
Reel and Taping Specification

Reel Specification



TYPE	SIZE		A	ϕ B	ϕ C	ϕ D	W	ϕ M
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

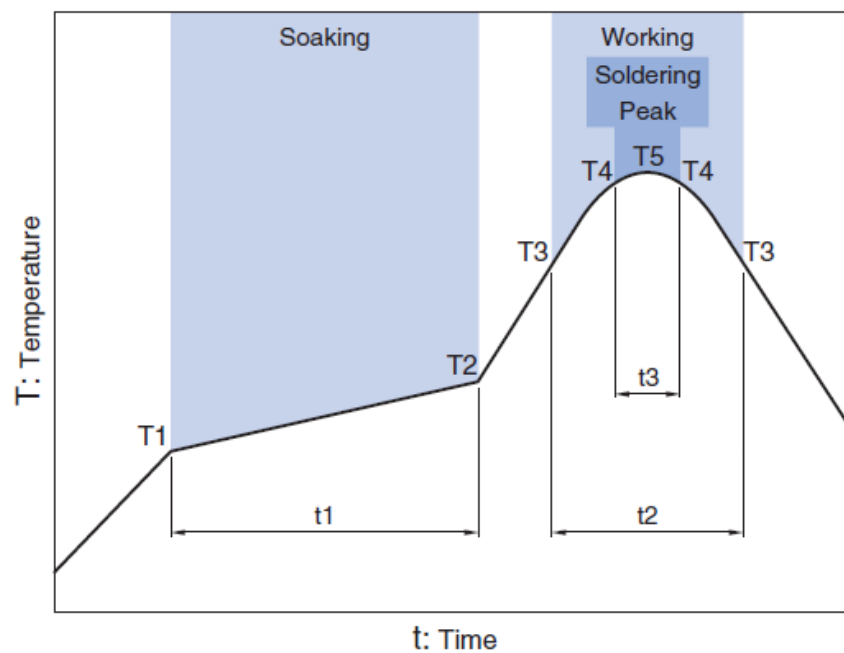


Packaging	Type	A	B	W	E	F	G	H	T	ϕD	P
Paper Type	3216	1.90 ± 0.20	3.50 ± 0.20	8.0 ± 0.20	1.75 ± 0.10	3.5 ± 0.05	4.0 ± 0.10	2.0 ± 0.05	0.75 ± 0.10	$1.50^{+0.10}_{-0}$	4.0 ± 0.1

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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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