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生效日期：2025-12-22

东莞市合康电子有限公司

Dongguan Hekang Electronic co., LTD

Chip Antenna

承 认 书

客户名称：成都四相致新科技有限公司	制造商/Manufacturer：东莞市合康电子有限公司
客户料号：	产品型号/Model：3216 Chip Antenna, (R) ,6500MHz&8000MHz, TypeA1M1
部品名：陶瓷天线	产品料号/Product Part Number：ANT3216R6580A1M1 版本/Version: A01

客户接受

This Specifications is received

签 章 SIGN:

接受日 DATE:

拟 制 Drawn by	审 核 Checked by	批 准 Approved by

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3216 UWB Chip Antenna: ANT3216R6580A1M1

Application:

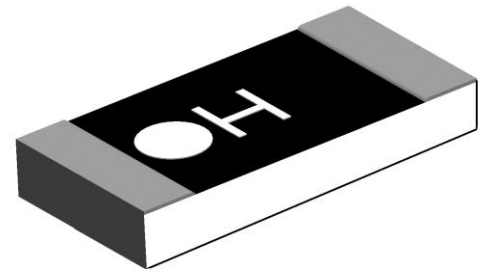
UWB indoor location, Smart Key etc...

Features

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

Part number

ANT 3216 R 6580 A1 M1
(1) (2) (3) (4) (5) (6)



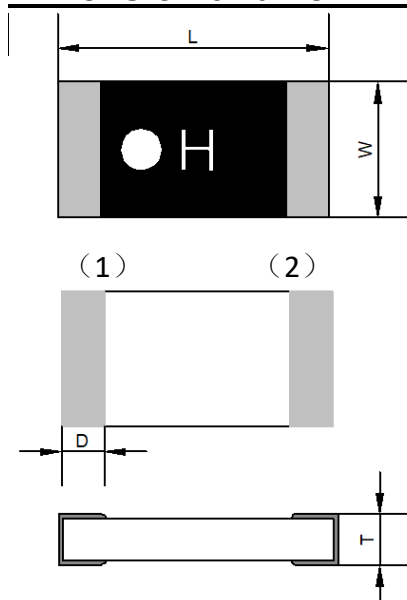
(1) Product Code	Chip Antenna
(2) Size Code	3.2x1.6mm
(3) Packing	Tape and reel
(4) Frequency	6.5&8GHz
(5) Series	A1
(6) Type	M1

Electrical Specification

Working Frequency Range	6240~6740 MHz	7740~8240 MHz
Peak Gain	3.0 dBi	4.0 dBi
Impedance	50 Ohm	
VSWR	3.0(Max)	
Polarization	Linear	
Azimuth Beamwidth	Omni-directional	
Operation Temperature(°C)	-40~85°C	

The specification is defined on HEK EVB.

Dimension and Terminal Configuration



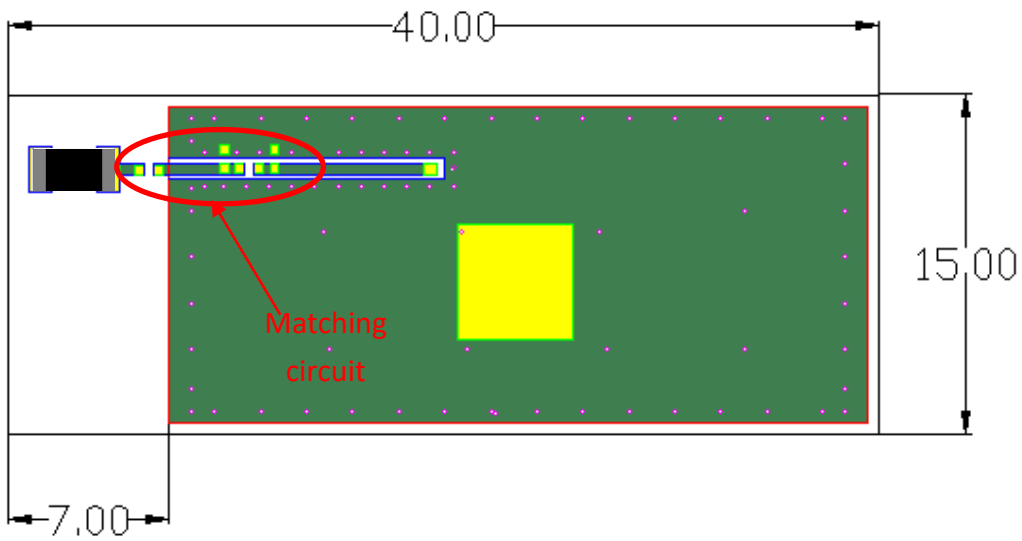
Dimension (mm)	
L	3.2±0.15
W	1.6±0.15
T	0.6±0.15

No.	Terminal Name
1	Feeding
2	Soldering

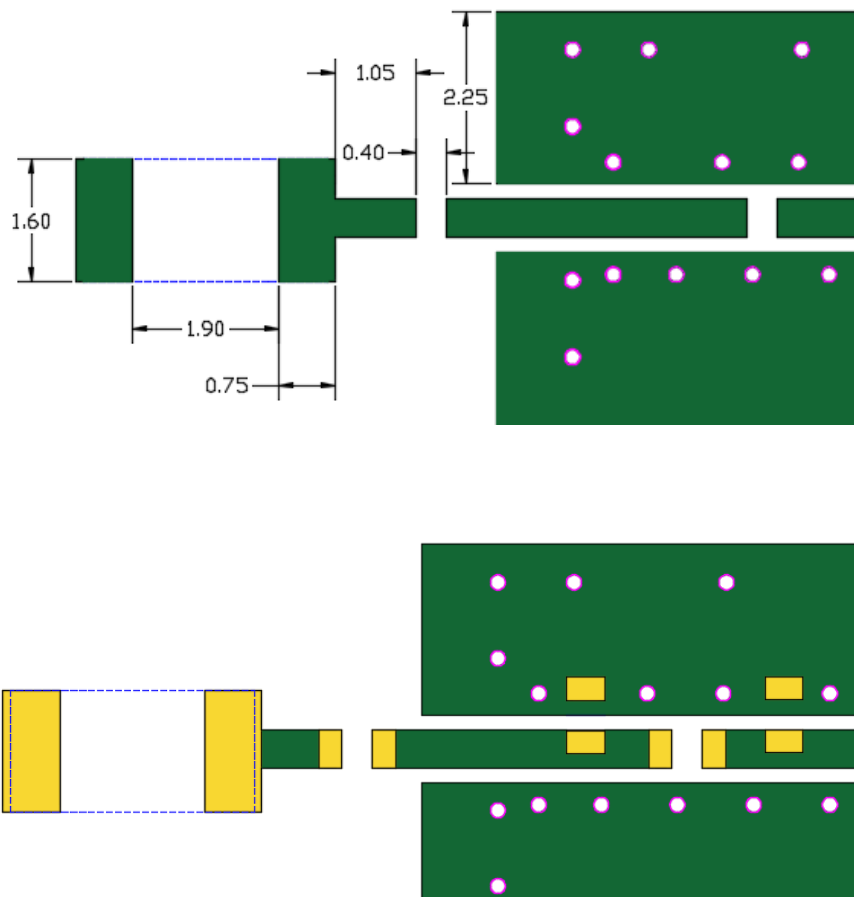
3216 UWB Chip Antenna: ANT3216R6580A1M1

Evaluation Board Reference

PCB Dimension



Antenna Layout Reference



Unit : mm

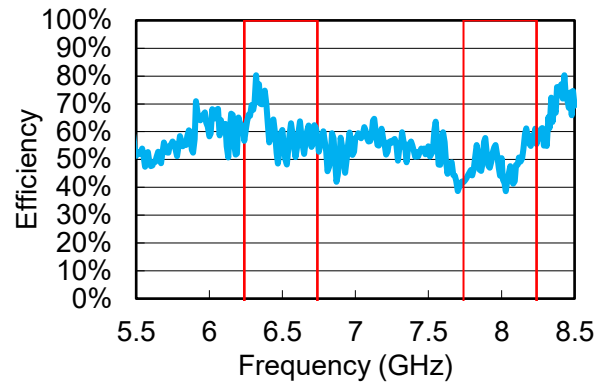
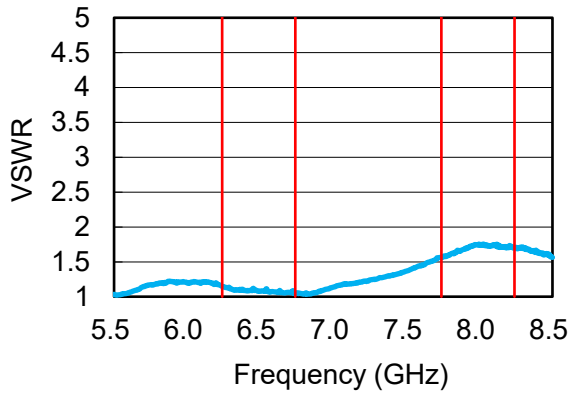
: Chip Antenna
 : Land Pattern

3216 UWB Chip Antenna: ANT3216R6580A1M1

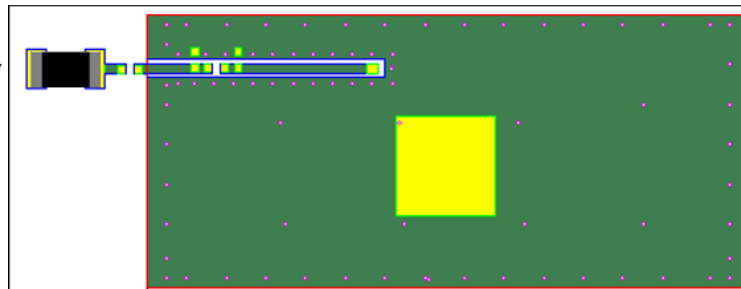
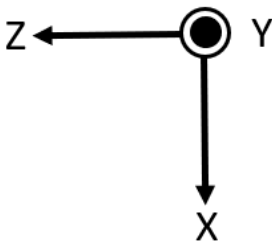
Electrical Characteristics

Return Loss & Radiation

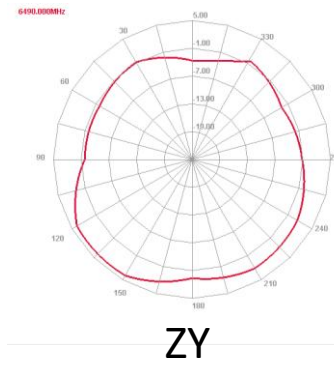
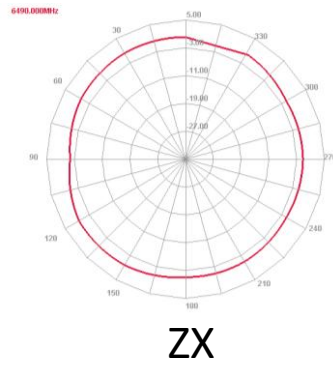
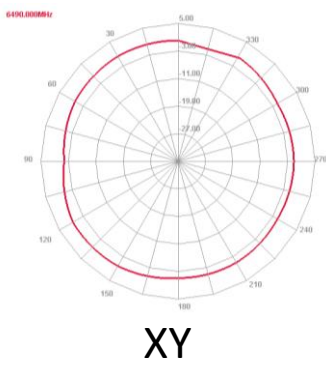
VSWR&Efficiency



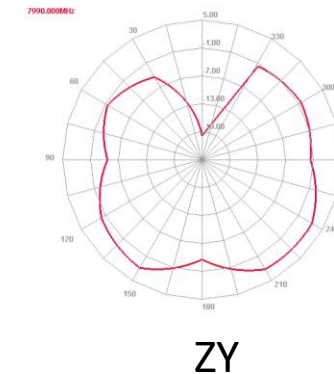
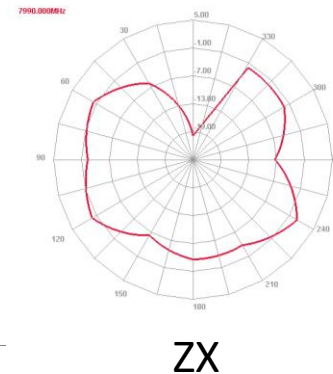
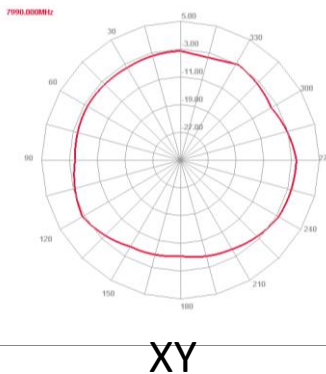
Radiation Pattern



Frequency=6489MHz

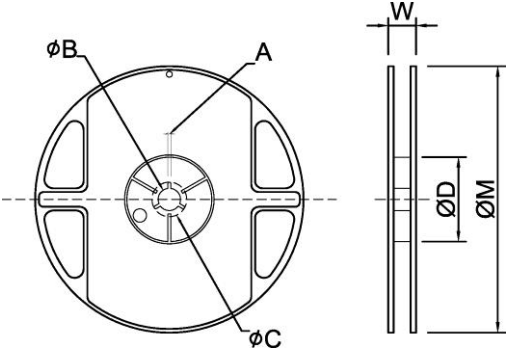


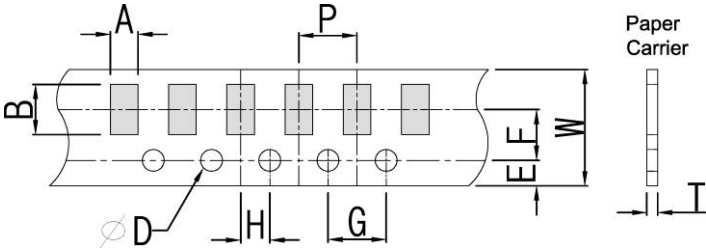
Frequency=7987MHz



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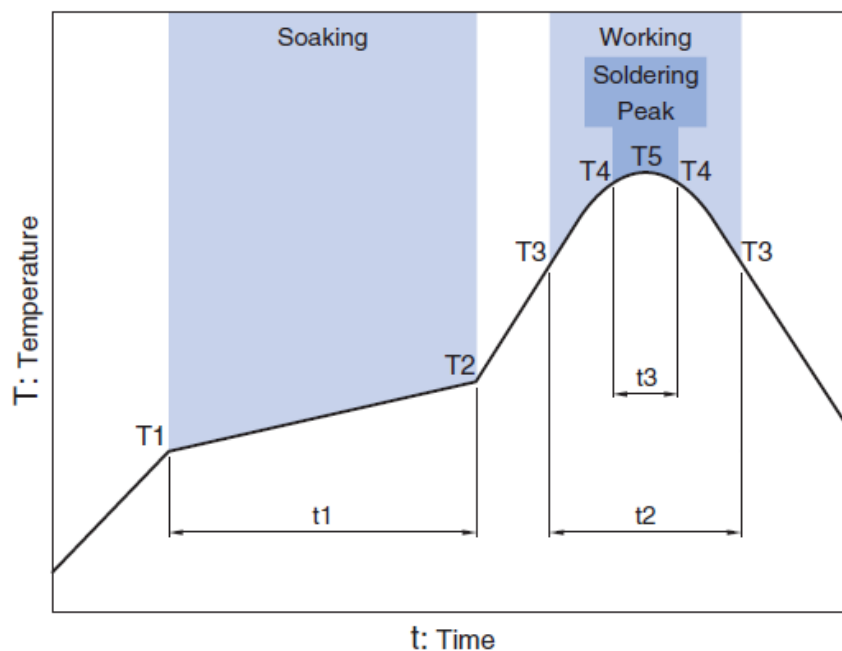
Taping Specifications

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

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.

Revision History

Version	Date	Description
Preliminary	SEP.2023	preliminary version
V1.0	Jan.2024	Newly release
V2.0	Oct.2024	Update size
V3.0	Aug.2025	Update Silk screen, add “H” char