

深圳市恒祥通天线技术有限公司

承认书

CUSTOMER		奔啦啦	
CS P/N		ABGCOM-00192	
HX P/N		3216F245C02	
Checked by(RF)	Checked by(ME)	Checked by(QA)	Approval led by
Customer Approval			

2.4GHz 3216 Chip Antenna: FH200A

Application:

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

Features

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



Part number Information

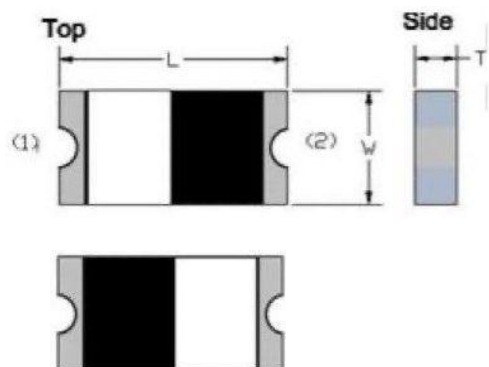
Product Type	Chip Antenna
Size Code	3.2x1.6mm(±0.2mm)
Material	High K material
Frequency	2.4~2.5GHz
Feeding mode	PIFA& Single Feeding
Antenna type	Type=0X

Electrical Specification

Working Frequency Range	2400~2500 MHz
Bandwidth	120 MHz(Min.)
Peak Gain	1.25 dBi(Typ.)
Impedance	50 Ohm
Return loss	10 dB(Min)
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Operation Temperature(°C)	-40~85°C
Resistance to Soldering Heats	10sec.(@280°C)
Termination	Ni/Au(Leadless)

The specification is defined on EVB.

Dimension and Terminal Configuration

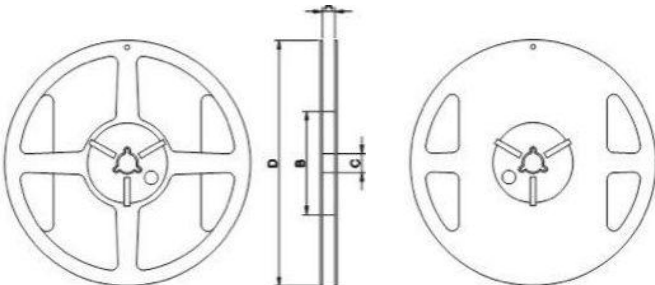


Dimension(mm)	
L	3.20±0.20
W	1.60±0.20
T	0.45±0.20

No.	Terminal Name
1	Feeding/GNG
2	GND/Feeding

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Taping Specifications

Reel and Taping Specification							
Reel Specification		07x8mm					
							
	TYPE	SIZE		A	B	C	D
	3216	7"	5K/Reel	9.0±0.5	60±2	13.5±0.5	178±2

Tapping Specification

A

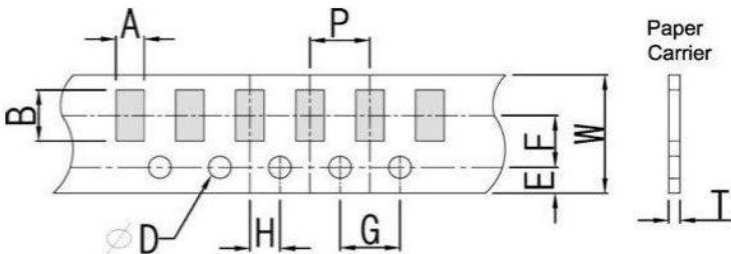
P

Paper Carrier

B

HG

I



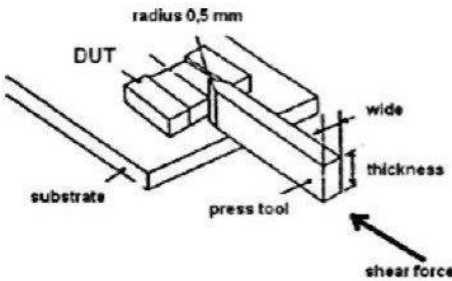
Packaging	Type	A	B	W	E	F	G	H	T	y/D	P
Paper Type	3216	1.90±0.20	3.50±0.20	8.0±0.20	1.75±0.10	3.5±0.05	4.0±0.10	2.0±0.05	0.75±0.10	1.50±0.10	4.0±0.1

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Reliability Table

Test Item	Procedure	Requirements	Ceramic Type	Remark(Reference)
Electrical Characterization		Fulfill the electrical specification		User Spec.
Thermal Shock	1.Preconditioning: 50±10℃/1 hr, then keep for 24±1 hrs at room temp. 2. Initial measure: Spec: refer Initial spec. 3.Rapid change of temperature test:-30℃ to +85℃;100 cycles;15 minutes at Lower category temperature;15 minutes at Upper category temperature.	No Visible Damage. Fulfill the electrical specification.		MIL-STD-202107
Temperature Cycling	1.Initial measure: Spec: refer Initial spec.2.100 Cycles(-30℃ to +85℃), Soak Mode=1(2 Cycle/hours).3.Measurement at 24 ± 2Hours after test condition.	No Visible Damage.Fulfill the electrical specification.		JESD22JA104
High Temperature Exposure	1.Initial measure: Spec: refer Initial spec.2.Unpowered;500hours@ T=+85℃3.Measurement at 24 ±2 hours after test.	No Visible Damage.Fulfill the electrical specification.		MIL-STD-202108
Low Temperature Storage	1.Initial measure: Spec: refer Initial spec.2.Unpowered;500hours @T=-30℃T=-30℃.3.Measurement at 24 ±2 hours after test.	No Visible Damage. Fulfill the electrical specification.		MIL-STD-202108
Solderability(SMD Bottom Side)	Dipping method:a.Temperature:235±5℃b.Dipping time:3±0.5s	The solder should cover over 95% of the critical area of bottom side.		IEC 60384-21/224.10
Soldering Heat Resistance(RSH)	Preheating temperature: 150 ± 10°0±10℃.Preheating time:1~2 min.Solder temperature:260 ±5℃.Dipping time:5±0.5s	No Visible Damage.		IEC 60384-21/224.10
Vibration	5g's for 20 min., 12 cycles each of 3 orientationsNote:Use 8"X5" PCB.031" thick 7 secure points on, one long side and 2 secure points at corners of opposite sides.Parts mounted within 2" from any secure point. Test from 10-2000Hz.	No Visible Damage.		MIL-STD-202Method 204
Mechanical Shock	Three shocks in each direction shall be applied along the three mutually perpendicular axes of the test specimen (18 shocks)Peak value: 1,500g'sDuration:0.5msVelocity change:15.4 ft/sWaveform:Half-sine	No Visible Damage.		MIL-STD-202Method 213
Humidity Bias	1.Humidity:85% R.H.,Temperature:85±2℃.2.Time:500±24 hours.3.Measurement at 24 ± 2hrs after test condition.	No Visible Damage.Fulfill the electrical specification.		MIL-STD-202Method 106

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BoardFlex(SMD)	1. Mounting method:IR-Reflow.PCB Size (L:100 x W:40 x T:1.6mm)2. Apply the load in direction of the arrow until bending reaches2mm.	No Visible Damage.	AEC-Q200005
Adhesion	Force of 1.8Kg for 60 seconds.radius 0,5mmDUTthicknesssubstratepress toolshear force 	No Visible DamageMagnification of 20X or greater may be employedfor inspection of the mechanical integrity of the device body terminals and body/terminal junction.	AEC-Q200006
PhysicalDimension	Any applicable method using x10 magnification, micrometers, calipers, gauges, contour projectors, or other measuring equipment, capable of determining the actual specimen dimensions.	In accordance with specification.	JESD22JB100

Revision History

Revision	Date	Content
1	2019/03/01	New Datasheet
2	2020/02/22	Add 2D radiation characteristic