

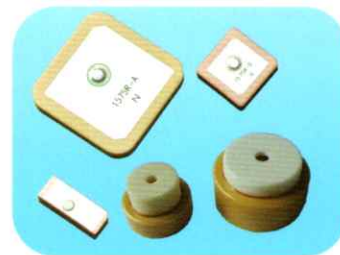
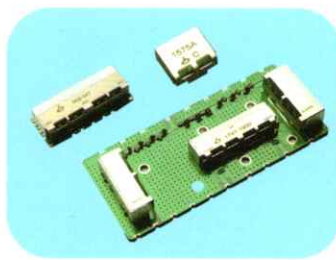


嘉康电子

JIAKANG ELECTRONICS

MICROWAVE DIELECTRIC PRODUCTS

微波介质产品



浙江嘉康电子股份有限公司

ZHEJIANG JIAKANG ELECTRONICS CO., LTD.



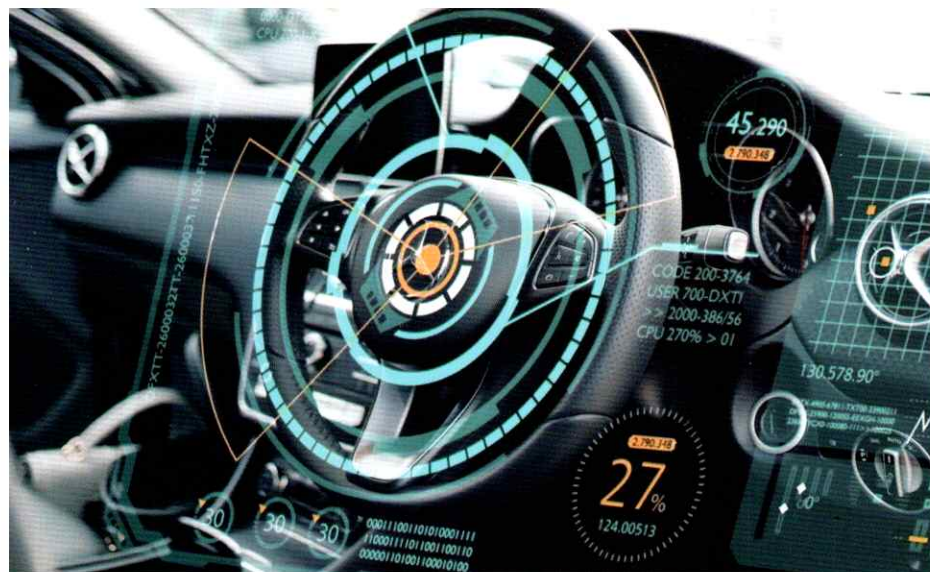
公司以新型电子元器件制造为主业，主要从事电子陶瓷元器件的研究与生产，专业生产微波介质陶瓷元器件、压电传感/换能元器件、压电陶瓷频率元件和一体成型电感等，产品广泛应用于移动通信、卫星导航定位授时、网络通信、射频识别（RFID）、智能检测、智能电器、智能家居、计算机和电子烟等领域。

浙江嘉康电子股份有限公司（原嘉兴市电子陶瓷厂）创建于1986年4月，2000年3月整体改制设立股份有限公司。公司系国家级高新技术企业，荣获中国出口商品优秀企业、中国电子行业知名品牌、浙江省名牌产品、浙江省著名商标、浙江省电子信息产业百家重点企业，多次评为浙江省电子信息50家成长性特色企业。

公司是中国电子元件行业协会常务理事和中国电子元件行业协会电子陶瓷及器件分会副理事长单位。

Established in 1986, Zhejiang Jiakang Electronics Co., Ltd. (formerly Jiaxing Electronic Ceramics Factory) was restructured to be a limited company in 2000. We are the national-level high-tech enterprise, and has been awarded as Excellent Export Commodity Enterprise in China, Famous Brand in Chinese Electronics Industry.

We are mainly engaged in the research, development and production of new electronic components, including the microwave dielectric ceramic components, piezoelectric sensor/transducer, piezoelectric ceramic frequency components, etc. These products are widely used in mobile communications, satellite navigation, positioning and timing, network communications, RFID, smart detection, smart homes, computers and so on. Our annual production capacity reaches 800 million pieces and more than 50% are exported to worldwide. This will assure you short delivery and help you win in aggressive competition. As a leading manufacturer in China and dedicated to innovation and quality improvement continuously, we successfully support our international partners like Samsung, Whirlpool, Denso, HID, Delphi, Emerson, Daimler-Benz, Texas Instruments etc. We strictly implement ISO9001, ISO14001 and IATF16949 systems. As a responsible supplier, we pay high attention to our environment and produce eco-friendly products. Your demands are our passion to move forward.



目录 Contents

介质天线命名示例 Dielectric Patch Antenna Part Numbering	01
DAE系列天线 DAE Antenna Series	02
DAB系列天线 DAB Antenna Series	04
DAD系列天线 DAD Antenna Series	07
DAL系列天线 DAL Antenna Series	09
DAC系列天线 DAC Antenna Series	10
DAF系列天线 DAF Antenna Series	11
天线常用规格的边长及馈点偏心参数 Pin Location of Standard Antenna Size	13
Chip天线 Chip Antenna	14
介质滤波器命名示例 Dielectric Filter Part Numbering	16
介质滤波器 Dielectric Filter	17
介质波导滤波器 Dielectric Waveguide Filter	20
双模滤波器 Multi-mode Filter	22
Wifi滤波器 Wifi Filter	23
介质双工器命名示例 Dielectric Duplexer Part Numbering	25
介质双工器 Dielectric Duplexer	26
介质谐振器命名示例 Dielectric Resonator Part Numbering	29
TE_{015} 模介质谐振器 TE_{015} Mode Dielectric Resonator	29
典型材料列表 Typical Microwave Dielectric Material System	31

介质天线命名示例 Dielectric Patch Antenna Part Numbering

DA	E	1575	R	2540	A
①	②	③	④	⑤	⑥

介质天线代码说明 Dielectric Antenna Code Description

编号 No	代码 Code	代码说明 Descriptions	
①	DA	产品类别 Product Type	介质天线元件 Dielectric Antenna
②	E	结构 Structure	带馈电针（瓷块正方形） With Feeding Pin(Square Shape)
	L		带馈电针（瓷块长方形） With Feeding Pin(Rectangular Shape)
	C		边沿馈电 Edge Feeding Mode
	B		单片天线，双馈电针 Single Patch, Dual Feeding Pins
	D		多片天线（单只或多只馈电针） Stacked Antennas(Single or Multiple Pins)
	F		边沿馈电，带IC安装位置 Edge Feeding mode, with IC Installation Area
③	1575	标称工作频率 Nominal Frequency	单位：MHz Unit: MHz
④	R	极化方式 Polarization Mode	右旋圆极化 RHCP
	L		左旋圆极化 LHCP
	X		线性极化 Linear Polarization
⑤	2540	外型尺寸 Overall Dimensions	前二位代表单边长度或直径（mm），中间二位代表宽度（mm）（六位时）， 后二位代表厚度（×0.1mm） The First Two Stand for Length or Diameter(mm),the Middle Two Stand for Width (mm) (when Total 6 Numerals),the Last Two Stand for Thickness(× 0.1mm)
⑥	A	类型 Type	代表电极形式、馈电点位置或瓷件材料 Electrode Pattern,Pin Position or Material



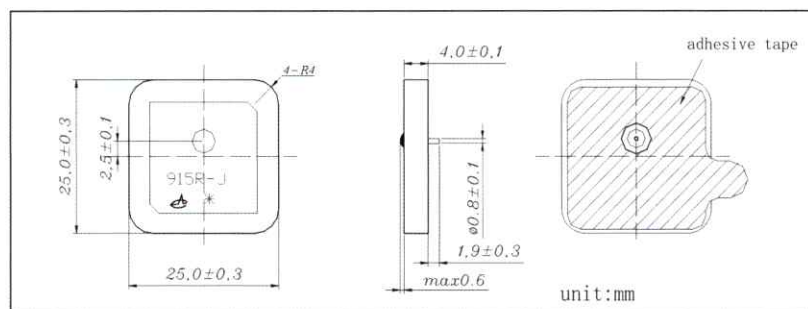
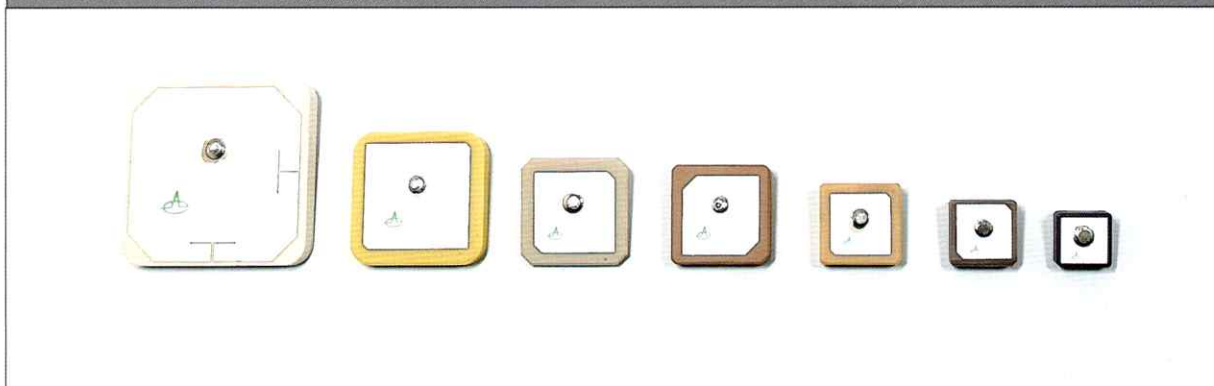
DAE系列天线 DAE Antenna Series

型号 Part Number	尺寸(mm) Size L*W(mm)	标称频率 Nominal Frequency (MHz)	-10dB带宽 -10dB Bandwidth (MHz) min	驻波比 VSWR(in BW)max	增益 Gain (dBi) typ.	接地板尺寸 GND Size (mm)	应用 Application
DAE915R78□□A	78.5×78.5	902-928	26	2.0	4.5	95×95	RFID、ETC and DSRC
DAE915R61□□A	61.5×61.5	902-928	8	2.0	4.0	95×95	
DAE915R40□□A	40×40	902-928	5	2.0	3.0	70×70	
DAE915R35□□C	35×35	902-928	3	2.0	2.0	40×40	
DAE915R25□□J	25×25	902-928	2	2.0	1.5	40×40	
DAE915R18□□G	18×18	902-928	2	2.0	0.5	40×40	
DAE5810R13□□C	13×13	5725-5850	400	2.0	4.0	40×40	BD+GPS
DAE1568R35□□A	35.5×35.5	1561-1575	30	2.0	4.5	50×50	
DAE1568R25□□A	25×25	1561-1575	25	2.0	4.5	70×70	
DAE1568R20□□A	20×20	1561-1575	20	2.0	4.0	70×70	
DAE1568R18□□C	18×18	1561-1575	—	—	3.0	40×40	
DAE1568R18□□F	18.5×18.5	1561-1575	—	—	3.0	40×40	
DAE1568R18□□H	18.5×18.5	1561-1575	—	—	3.0	40×40	
DAE1568R15□□D	15×15	1561-1575	—	—	1.5	27×27	
DAE1568R13□□A	13×13	1561-1575	—	—	0.5	22×22	
DAE1568R12□□A	12×12	1561-1575	—	—	0.0	15×15	
DAE1568R10□□A	10×10	1561-1575	—	—	-2.0	12×12	GPS
DAE1575R35□□A	35.5×35.5	1575.42	18	2.0	4.5	50×50	
DAE1575R25□□A	25×25	1575.42	15	2.0	4.5	70×70	
DAE1575R25□□B	25×25	1575.42	15	2.0	4.5	70×70	
DAE1575R20□□A	20×20	1575.42	8	2.0	3.5	40×40	
DAE1575R18□□C	18×18	1575.42	8	2.0	3.0	40×40	
DAE1575R18□□D	18×18	1575.42	8	2.0	3.0	40×40	
DAE1575R18□□F	18.5×18.5	1575.42	8	2.0	3.0	40×40	
DAE1575R18□□H	18.5×18.5	1575.42	8	2.0	3.0	40×40	
DAE1575R15□□D	15×15	1575.42	6	2.0	1.5	27×27	
DAE1575R13□□A	13×13	1575.42	5	2.0	0.5	22×22	
DAE1575R12□□A	12×12	1575.42	5	2.0	0.0	15×15	
DAE1575R10□□A	10×10	1575.42	4	2.0	-2.0	12×12	
DAE1584R45□□A	45×45	1559-1610	60	2.0	5.5	70×70	BD+GPS+ GLONASS
DAE1584R40□□D	39.5×39.5	1559-1610	60	2.0	5.5	70×70	
DAE1590R35□□A	35.5×35.5	1575-1610	40	2.0	5.0	70×70	GPS+ GLONASS
DAE1590R25□□A	25×25	1575-1610	—	—	4.5	70×70	
DAE1590R20□□A	20×20	1575-1610	—	—	4.0	70×70	
DAE1590R18□□C	18×18	1575-1610	—	—	3.0	40×40	
DAE1590R18□□F	18.5×18.5	1575-1610	—	—	3.0	40×40	
DAE1590R18□□H	18.5×18.5	1575-1610	—	—	3.0	40×40	
DAE1590R15□□D	15×15	1575-1610	—	—	1.5	27×27	
DAE1590R13□□A	13×13	1575-1610	—	—	0.5	22×22	
DAE1590R12□□A	12×12	1575-1610	—	—	0.0	15×15	
DAE1590R10□□A	10×10	1575-1610	—	—	-2.0	12×12	
DAE2338L28□□B	28×28	2338	120	2.0	7.0	45×60	SDARS
DAE2338L28□□C	28×28	2338	160	2.0	7.0	70×70	
DAE2338L25□□B	25×25	2338	56	2.0	6.5	70×70	
DAE2338L25□□D	25×25	2338	46	2.0	6.0	40×40	
DAE2338L20□□C	20×20	2338	56	2.0	5.0	26×50	

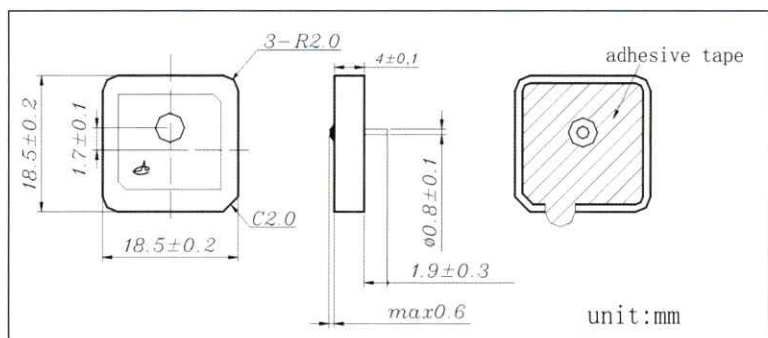
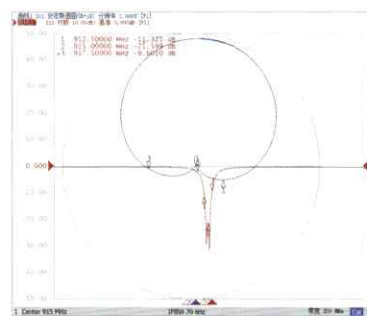
DAE系列天线 DAE Antenna Series

型号 Part Number	尺寸(mm) Size L*W(mm)	标称频率 Nominal Frequency (MHz)	-10dB带宽 -10dB Bandwidth (MHz) min	驻波比 VSWR(in BW)max	增益 Gain (dBi) typ	接地板尺寸 GND Size (mm)	应用 Application
DAE2450R25□□K	25×25	2450	90	2.0	6.5	70×70	Bluetooth
DAE2450R20□□C	20×20	2450	60	2.0	6.0	70×70	
DAE2450R18□□J	18×18	2450	50	2.0	5.5	70×70	
DAE2450R15□□E	15×15	2450	40	2.0	5.0	50×50	
DAE2450R12□□C	12×12	2450	30	2.0	5.0	50×50	
注：天线厚度或外形尺寸、其他应用频段和极化方式等特殊需求，可接受定制 Remark:Can be customized ,like antenna's thickness,dimensions, frequency ,polarization mode,etc.							

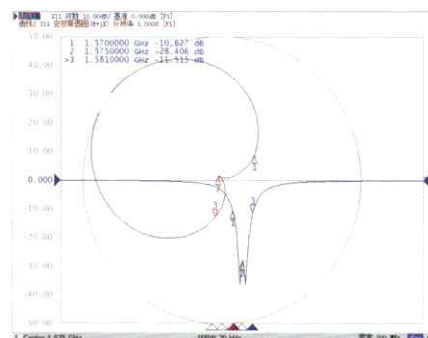
外型与尺寸 FIGURES AND DIMENSIONS



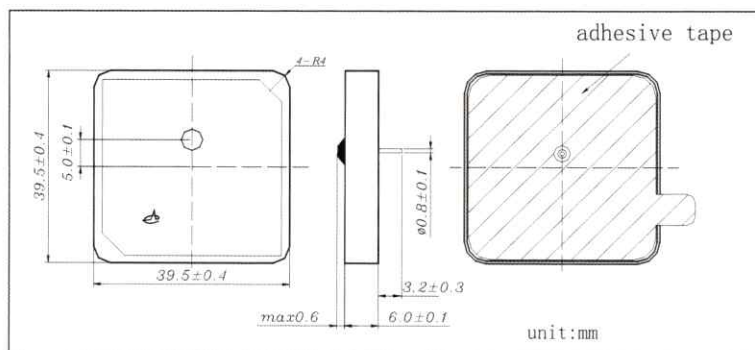
DAE915R2540J



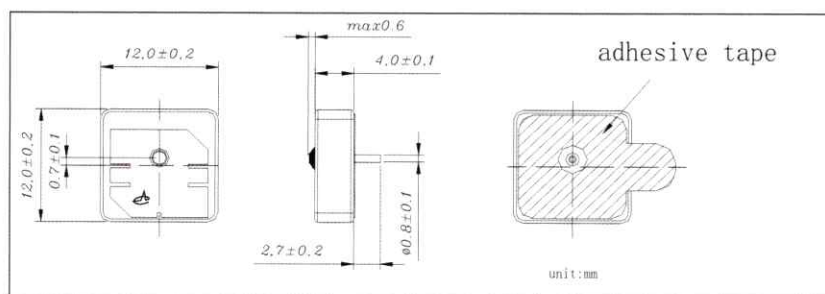
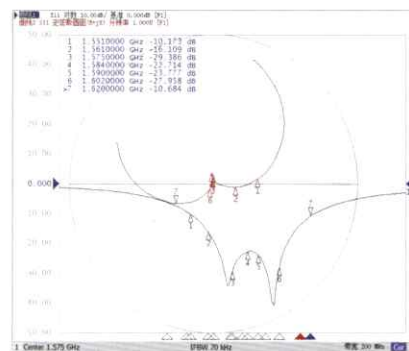
DAE1575R1840H



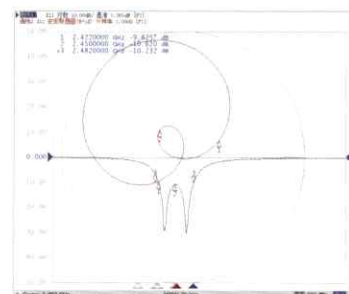
DAE系列天线 DAE Antenna Series



DAE1584R4060D



DAE2450R1240C



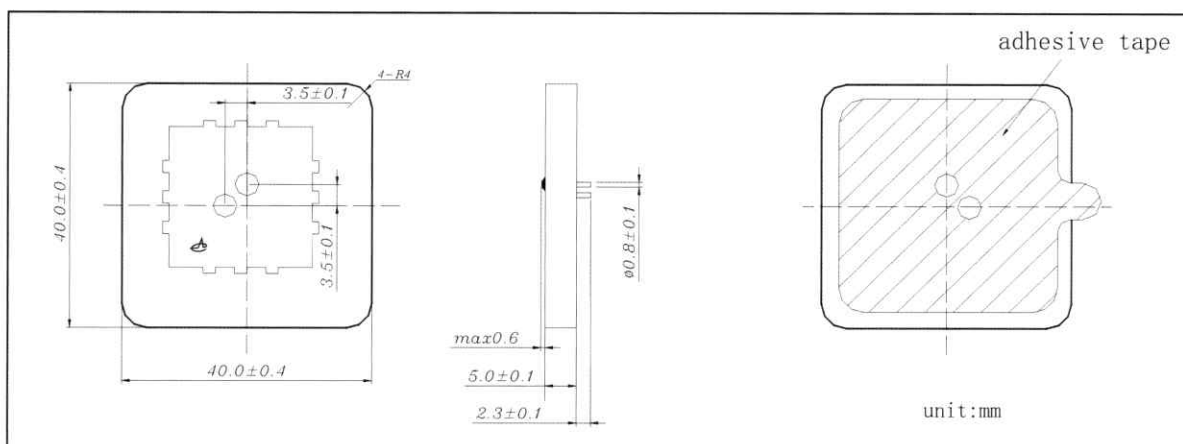
DAB系列天线 DAB Antenna Series

型号 Part Number	尺寸 Size L*W(mm)	应用频率范围 Application Frequency Range (MHz)	-10dB带宽 -10dB Bandwidth (MHz) min	驻波比 VSWR (in BW)max	接地板尺寸 GND Size (mm)	用途 Application
DAB915X60□□A	60 × 60	902-928	—	—	70 × 70	RFID ETC DSRC
DAB915X40□□A	40 × 40	902-928	—	—	50 × 50	
DAB915X35□□C	35.5 × 35.5	902-928	—	—	50 × 50	
DAB1176X50□□B	50 × 50	1166-1186	—	—	70 × 70	GNSS
DAB1227X40□□D	40 × 40	1217-1237	—	—	70 × 70	
DAB1582X40□□B	40.5 × 40.5	1559-1608	—	—	70 × 70	
DAB1582X40□□C	40 × 40	1559-1608	—	—	50 × 50	
DAB1582X35□□D	35 × 35	1559-1608	—	—	50 × 50	
DAB1582X25□□A	25 × 25	1559-1608	—	—	70 × 70	

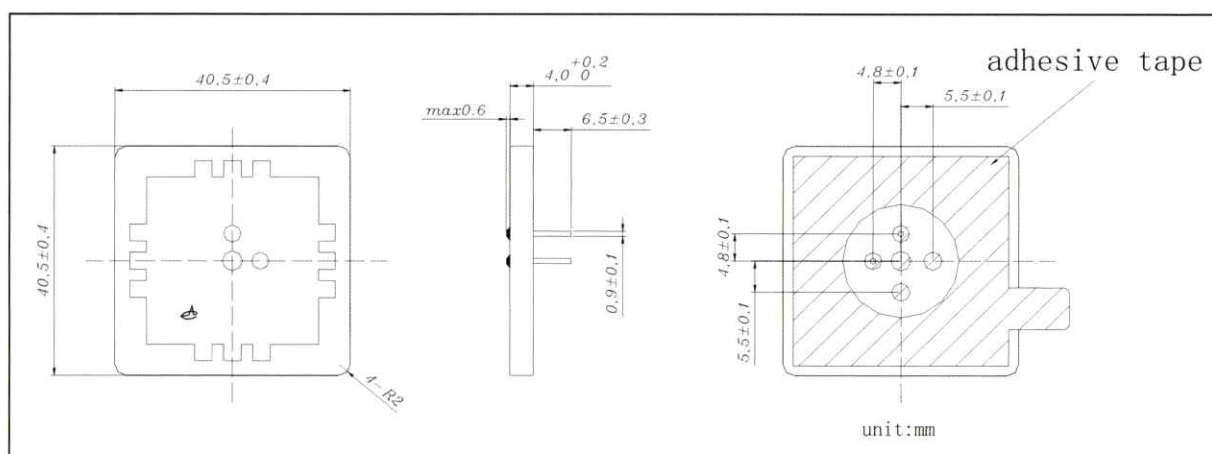
注：天线厚度或外形尺寸和其他应用频段，可接受定制

Remark: Can be customized, like antenna's thickness, dimensions, frequency, polarization mode, etc.

■ DAB系列天线 DAB Antenna Series

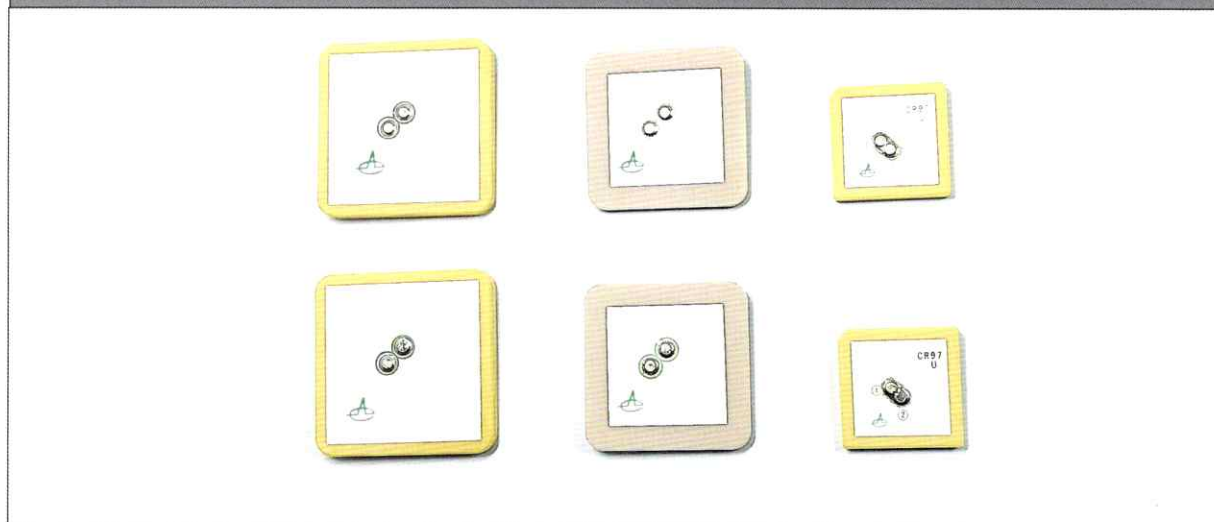


DAB915X4050A产品尺寸图Dimension



DAB1582X4040B产品尺寸图Dimension

外型与尺寸 FIGURES AND DIMENSIONS



浙江嘉康电子股份有限公司



JIAKANG ELECTRONICS

Specialists in Dielectric Products

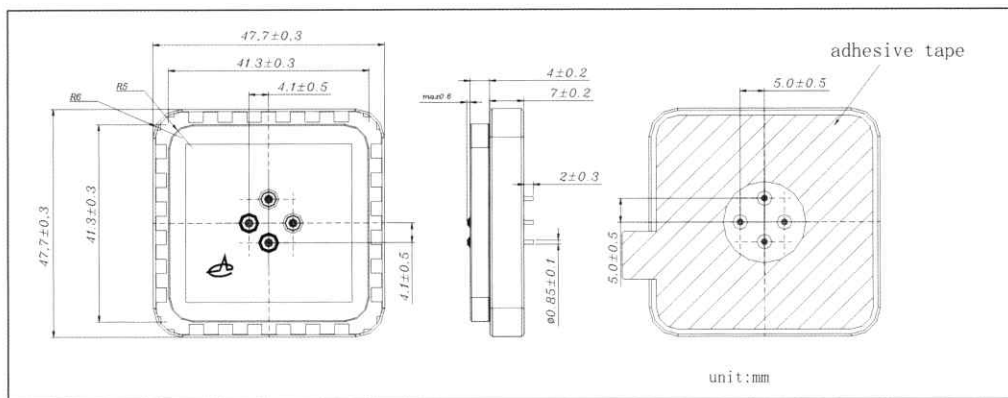
无人驾驶



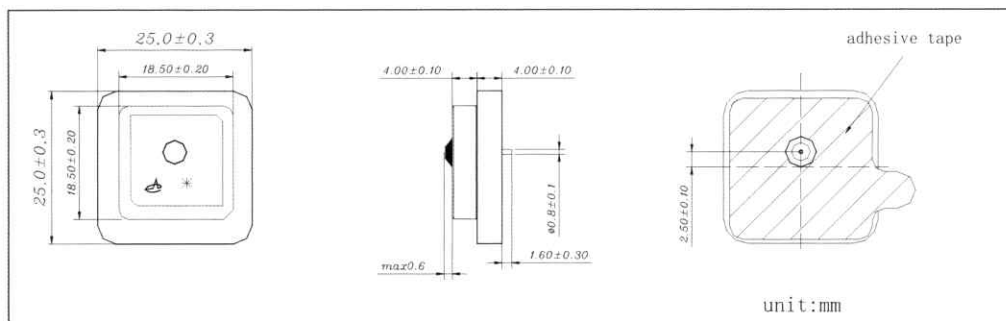
DAD系列天线 DAD Antenna Series

型号 Part Number	尺寸 Size L*W(mm)	应用频率范围 Frequency Range (MHz)	接地板尺寸 GND Size (mm)	用途 Application
DAD1176X-1575X5040B-4040B	50×50 40×40	1176 & 1575	70×70	GPS L1+L5
DAD1176X-1575X4770A-4140A	47×47 41×41	1176 & 1575	70×70	
DAD1176X-1575X3540A-2540A	35×35 25×25	1176 & 1575	70×70	
DADA1176R-1575R3840C-2540A	38×38 25×25	1176 & 1575	70×70	
DADA1176R-1575R3540E-2540A	35×35 25×25	1176 & 1575	70×70	
DADA1176R-1575R2540H-1840H	25×25 18.5×18.5	1176 & 1575	70×70	
DADA1176R-1575R2040E-1540D	20×20 15×15	1176 & 1575	70×70	
DADB1176R-1575R3540E-2540A	35×35 25×25	1176 & 1575	70×70	
DADB1176R-1575R2540P-1840H	25×25 18.5×18.5	1176 & 1575	70×70	GPS/SDARS
DADB1575R-2332L2520A-2540C	25×25	1575 & 2332	50×50	
DADB1575R-2332L2520A-2520C	25×25	1575 & 2332	50×50	
DADB1575R-2332L2020B-2020C	20×20	1575 & 2332	50×50	

注: 天线厚度或外形尺寸、其他应用频段和极化方式等特殊需求, 可接受定制
Remark: Can be customized ,like antenna's thickness,dimensions, frequency ,polarization mode,etc.



DAD1176X-1575X4770A-4140A Dimension



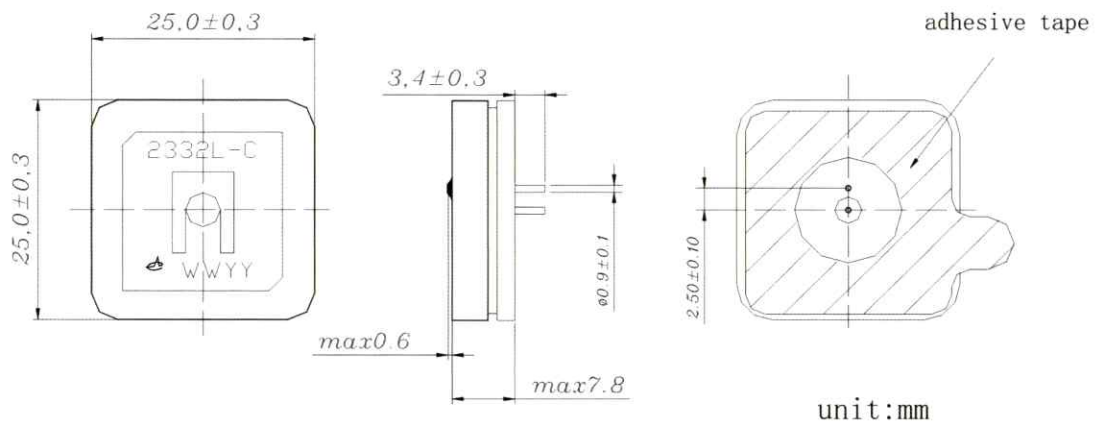
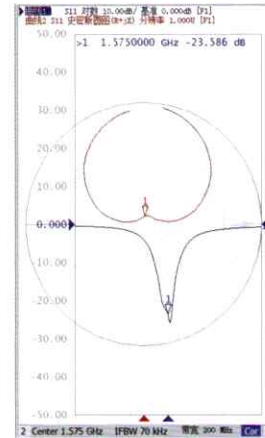
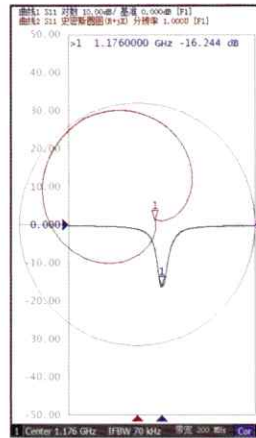
DADA1176R-1575R2540H-1840H Dimension



DAD系列天线 DAD Antenna Series

Characteristic Diagram

DADA1176R-1575R2540H-1840H特性图



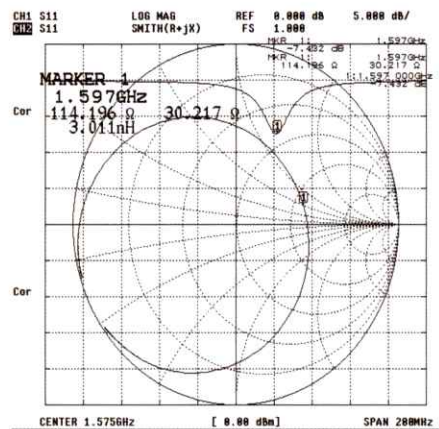
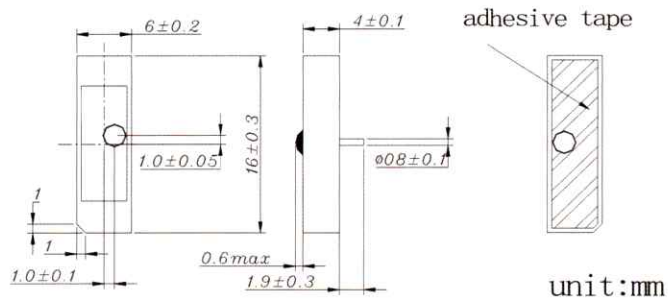
DADB1575R-2332L2520A-2540C Dimension

外型与尺寸 FIGURES AND DIMENSIONS



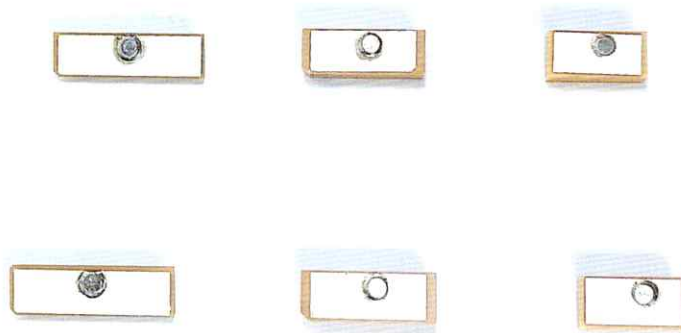
DAL系列天线 DAL Antenna Series

型号 Part Number	尺寸 Size L*W(mm)	标称频率 Nominal Frequency (MHz)	-10dB带宽 -10dB Bandwidth (MHz) min	驻波比 VSWR (in BW) max	接地板尺寸 GND Size (mm)	应用 Application
DAL1575X2006□□A	20×6	1575.42	—	—	20×6	GPS
DAL1575X2006□□B	20×6	1575.42	—	—	20×6	
DAL1575X1606□□A	16×6	1575.42	—	—	16×6	
注：天线厚度和应用频段，可接受定制 Remark:Antenna thickness and frequency can be customized.						



DAL1575X160640A

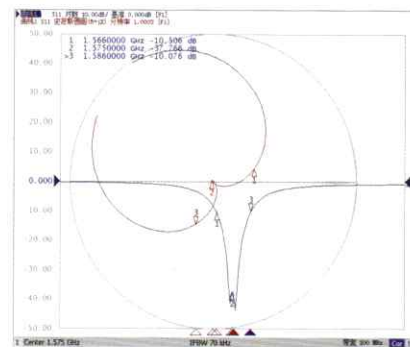
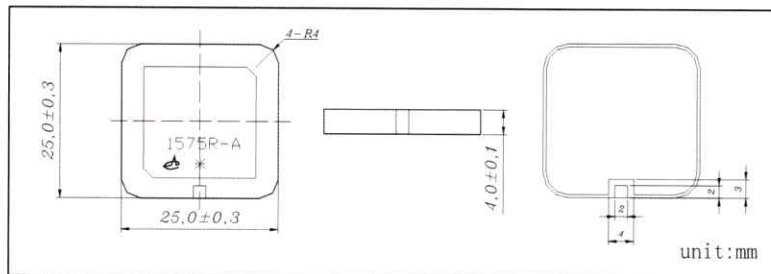
外型与尺寸 FIGURES AND DIMENSIONS



DAC系列天线 DAC Antenna Series

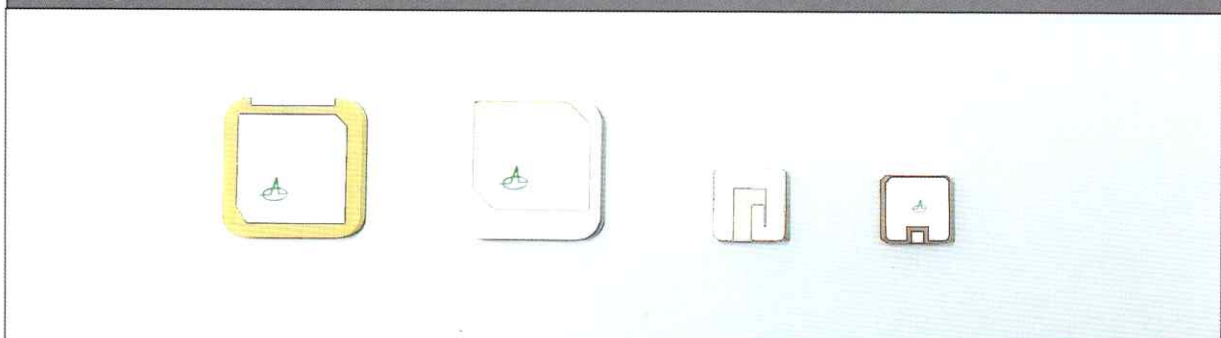
型号 Part Number	尺寸 Size L*W(mm)	标称频率 Nominal Frequency (MHz)	-10dB带宽 -10dB Bandwidth (MHz) min	驻波比 VSWR (in BW)max	接地板尺寸 GND Size (mm)	应用 Application
DAC868R25□□J	25×25	865-871	2.0	2.0	40×40	RFID、ETC、 DSRC
DAC915R25□□J	25×25	902-928	2.0	2.0	40×40	
DAC1568R25□□A	25×25	1561-1575	20.0	2.0	50×50	BD+GPS
DAC1568R20□□A	20×20	1561-1575	15.0	2.0	50×50	
DAC1568R18□□A	18×18	1561-1575	—	—	50×50	
DAC1568R15□□A	15×15	1561-1575	—	—	50×50	
DAC1568R12□□A	12×12	1561-1575	—	—	50×50	
DAC1568R10□□A	10×10	1561-1575	—	—	50×50	
DAC1575R25□□A	25×25	1575.42	15.0	2.0	50×50	GPS
DAC1575R20□□A	20×20	1575.42	10.0	2.0	50×50	
DAC1575R18□□A	18×18	1575.42	8.0	2.0	50×50	
DAC1575R15□□A	15×15	1575.42	8.0	2.0	50×50	
DAC1575R12□□A	12×12	1575.42	7.0	2.0	50×50	
DAC1575R10□□A	10×10	1575.42	6.0	2.0	50×50	
DAC1590R25□□A	25×25	1575-1610	—	—	50×50	GPS+ GLONASS
DAC1590R20□□A	20×20	1575-1610	—	—	50×50	
DAC1590R18□□A	18×18	1575-1610	—	—	50×50	
DAC1590R15□□A	15×15	1575-1610	—	—	50×50	
DAC1590R12□□A	12×12	1575-1610	—	—	50×50	
DAC1590R10□□A	10×10	1575-1610	—	—	50×50	Bluetooth
DAC2450R25□□B	25×25	2450	70	2.0	70×70	
DAC2450R12□□C	12×12	2450	30	2.0	50×50	

注: 天线厚度或外形尺寸、其他应用频段、极化方式和天线焊盘等特殊需求, 可接受定制
Remark: Antenna thickness, frequency, polarization mode and soldering pad can be customized.



DAC1575R2540A

外型与尺寸 FIGURES AND DIMENSIONS



DAF系列天线 DAF Antenna Series

型号 Part Number	尺寸 Size L*W(mm)	应用频率范围 Application Frequency Range (MHz)	接地板尺寸 GND Size (mm)	应用 Application
DAF□X3030H	30×30	902-928	150×150	RFID
DAF□X250930H	25×9	902-928	150×150	
DAF□X130930M	13×9	902-928	150×150	
DAF□X130730M	13×7	902-928	150×150	
DAF□X120730N	12×7	902-928	150×150	
DAF□X110321N	11×3	902-928	150×150	
DAF□X060525N	φ6×5	902-928	150×150	
注：868MHz应用频段同样适用。 Remark:868MHz frequency is also available.				

外型与尺寸 FIGURES AND DIMENSIONS



浙江嘉康电子股份有限公司



JIAKANG ELECTRONICS

Specialists in Dielectric Products



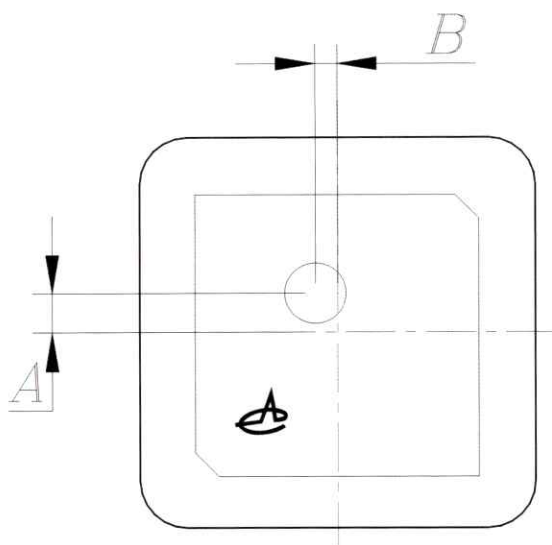
▲ 天线常用规格的边长及馈点偏心参数

Pin Location of Standard Antenna Size

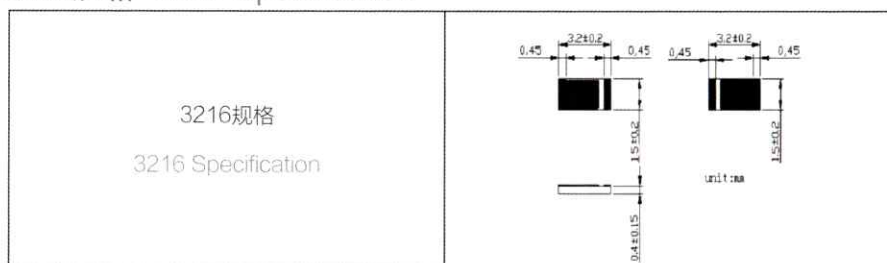
型号 Part Number	典型边长 (mm) 与公差 Typical Length and Tolerance	A 尺寸 A Size (mm)	B 尺寸 B Size (mm)
DAE35□□A	35.5±0.40	4.5	0.0
DAE25□□N	25±0.30	2.8	0.0
DAE25□□A	25±0.30	2.5	0.0
DAE25□□B	25±0.30	1.7	1.9
DAE20□□A	20±0.30	1.6	0.0
DAE18□□C	18±0.20	1.1	0.0
DAE18□□D	18±0.20	1.4	1.2
DAE18□□F	18.5±0.20	1.1	1.1
DAE18□□H	18.5±0.20	1.7	0.0
DAE15□□D	15±0.20	1.1	0.0
DAE13□□A	13±0.20	0.9	0.0
DAE12□□A	12.1±0.20	0.8	0.0
DAE10□□A	10±0.10	0.6	0.0

注：□□是天线厚度标识，天线厚度为□□*0.1mm

Remark: □□represent antenna thickness , Antenna Thickness=□□*0.1mm



■ Chip天线 Chip Antennas
▲ 3216规格 3216 Specification



电性能 ELECTRICAL SPECIFICATIONS

性能参数 (90 ×40 mm接地板) Performance Characteristics (90 ×40 mm ground plane)

项目 Items	内容 Content
外形尺寸 Outline Dimension	3.2x1.5x0.4mm
工作频率 Working Frequency	2400~2500MHz
电压驻波比 VSWR	2Max
阻抗 Impedance	50 Ω
最大输入功率 Maximum Input Power	2W
工作温度 Operating Temperature	-40 ~ +85℃

特点 Features

- 性能稳定可靠 Stable and reliable in performances
- 低频率温度系数 Low temperature coefficient of frequency
- 小尺寸 Low profile, compact size
- 符合ROHS规范 RoHS compliance
- 适用于SMT封装 SMT process compatible

应用 Applications

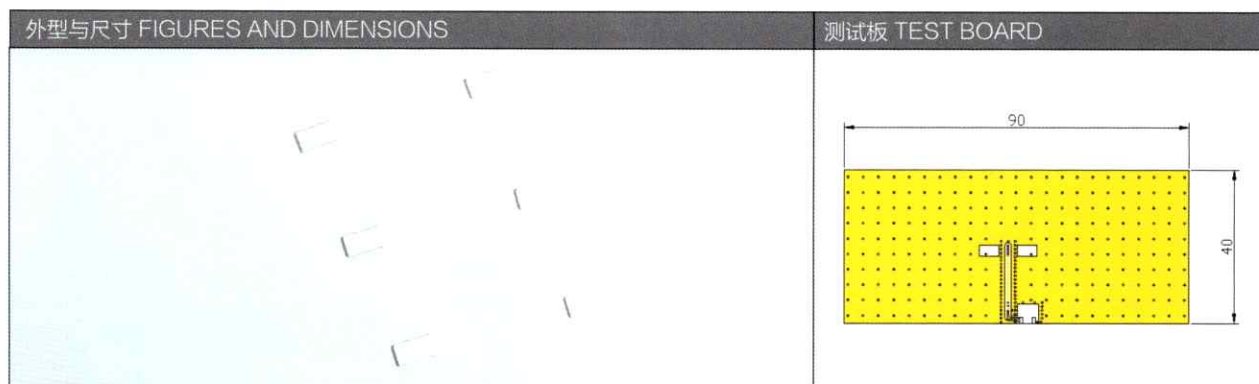
蓝牙耳机 Bluetooth earphone systems

带有WIFI和蓝牙功能的手持便携设备。

Hand-held devices with WiFi /Bluetooth functions.

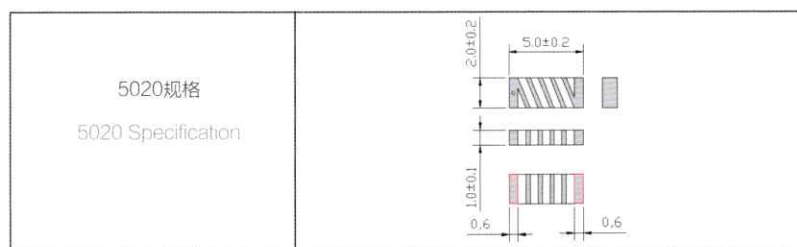
ZigBee

PCMCIA无线网卡或USB适配器 Wireless PCMCIA cards or USB adaptors



Chip天线 Chip Antennas

5020规格 5020 Specification



电性能 Electrical Specifications

性能参数 (40 × 40 mm 接地板) Performance Characteristics (40 × 40 mm ground plane)

项目 Items	内容 Content
外形尺寸 Outline Dimensions	5.0×2.0×1.0mm
工作频率 Working Frequency	2400~2500Mhz
电压驻波比 VSWR	2Max
阻抗 Impedance	50 Ω
最大输入功率 Maximum Input Power	2W
工作温度 Operating Temperature	-40~+85℃

特点 Features

性能稳定可靠 Stable and reliable in performances

低频率温度系数 Low temperature coefficient of frequency

小尺寸 Low profile, compact size

符合ROHS规范 RoHS compliance

适用于SMT封装 SMT process compatible

应用 Applications

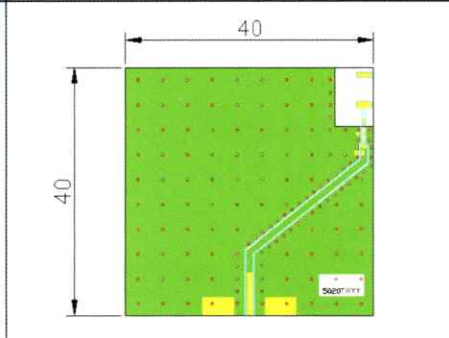
蓝牙耳机 Bluetooth earphone systems

带有WIFI和蓝牙功能的手持便携设备。

Hand-held devices with WiFi /Bluetooth functions.

ZigBee

PCMCIA无线网卡或USB适配器 Wireless PCMCIA cards or USB adaptors

外型与尺寸 FIGURES AND DIMENSIONS	测试板 TEST BOARD
	



浙江嘉康电子股份有限公司

地址：中国浙江省嘉兴市嘉杭路1188号

电话：+86-573-82600765/82600913/82600996

传真：+86-573-82600916

邮箱：SALES@JKELEC.COM

邮编：314001

ZHEJIANG JIAKANG ELECTRONICS CO., LTD

ADD: NO.1188 JIAHANG ROAD, JIAXING, ZHEJIANG, CHINA

TEL: +86-573-82600765/82600913/82600996

FAX: +86-573-82600916

E-MAIL: SALES@JKELEC.COM

POST CODE: 314001

深圳嘉凯电子有限公司（华南地区）

地址：深圳市福田区中康路128号卓越城一期一栋1204室

电话：+86-755-83178086

邮编：518000

SHENZHEN JIAKAI ELECTRICS CO., LTD (SOUTHEAST CHINA)

ADD: ROOM 1204, TOWER 1, EXCELLENCE CITY, NO. 128, ZHONGKANG RD.
FUTIAN DISTRICT, SHENZHEN CHINA.

TEL: +86-755-83178086

POST CODE: 518000