

SLDA Series Chip Antenna

LDA92-2R660G-S1

This antenna series is designed for the applications of ISM Band 2.4 GHz, just like as Bluetooth, WLAN, Home RF , etc.



Feature

Compact, Light weight ,built-in antenna with high gain , wide bandwidth and low cost.

Applications

Bluetooth , Wireless LAN, PHS , PDC , Home RF system ,etc contact us for the advanced PCB solutions about antenna designs.

Specifications

Part Number	Band Width	Peak Gain (V-XZ)	Average Gain(V-XZ)	VSWR (in BW)	Impedance
SLDA92-2R660G-S1	2610-2710MHz	3.0dBi typ	1.0dBi typ.	< 2	50 Ohm

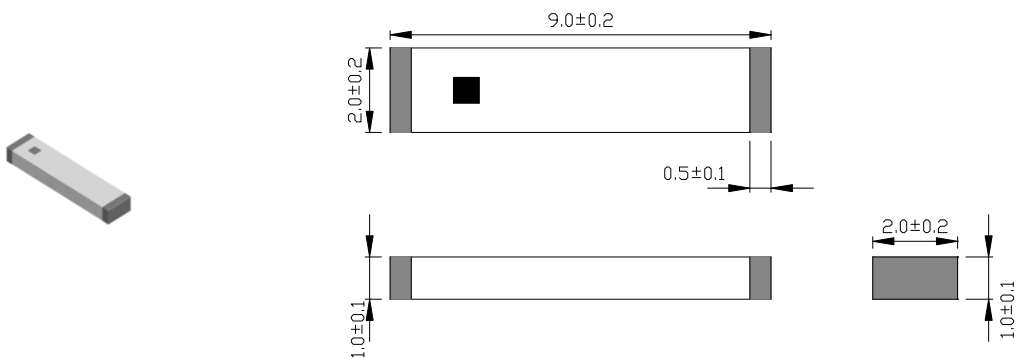
Operating Temperature Range : -40 ~ +85 °C

Storage Temperature Range : -40 ~ +85 °C

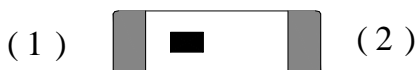
Power Capacity : 3W max.

Outline and Dimensions

Unit: mm

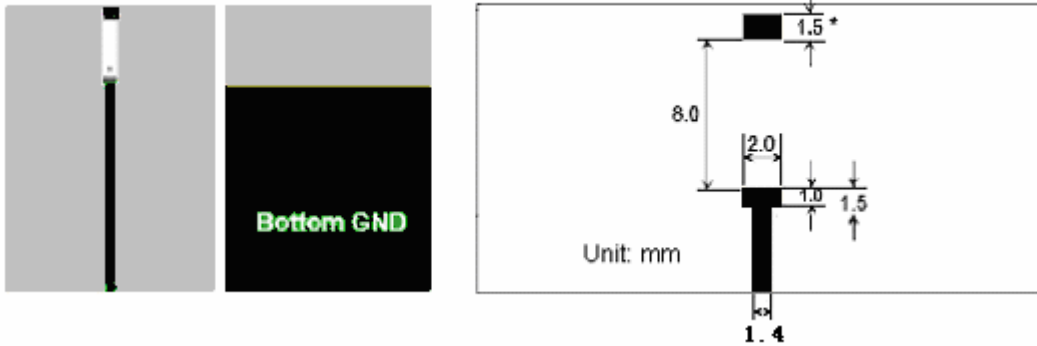


Terminal Configuration



No.	Terminal Name	No.	Terminal Name
(1)	Feeding Point	(2)	NC

EVALUATION BOARD AND LAND PATTERN

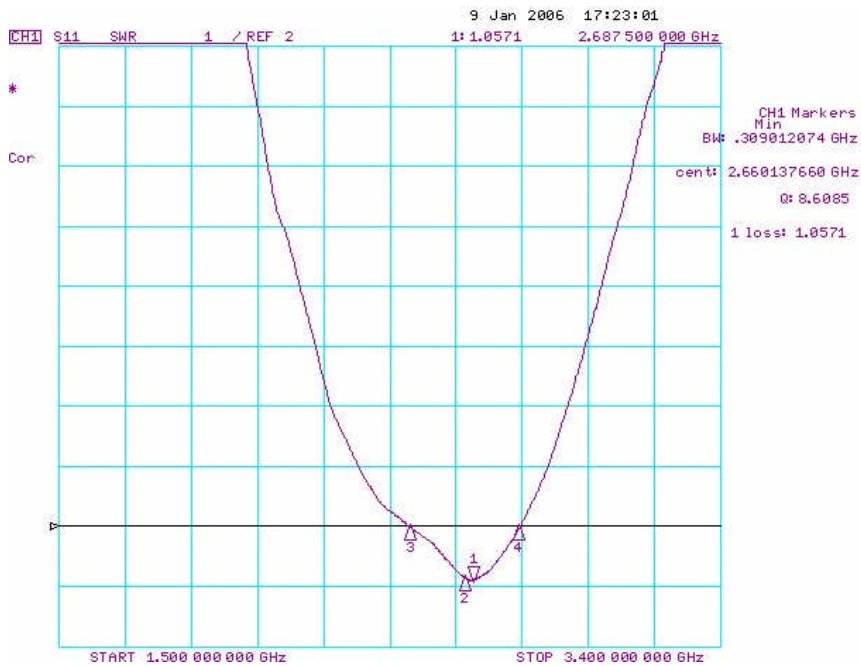


SAMPLE REQUEST

Frequency is changed with layout patterning of PCB.

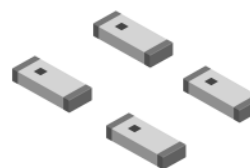
Please consult with us for appropriate design.

RETURN LOSS



SLDA52-2R540G-S1

This antenna series is designed for the applications of ISM Band 2.4 GHz, just like as Bluetooth、WLAN、Home RF , etc.



Feature

Compact, Light weight ,built-in antenna with high gain , wide bandwidth and low cost.

Applications

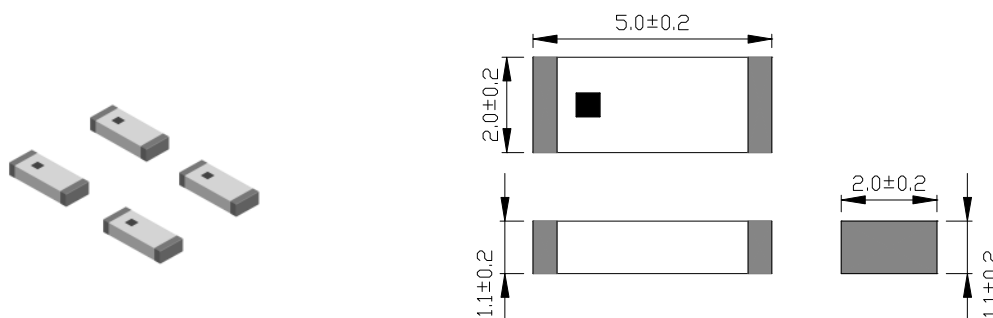
Bluetooth 、Wireless LAN、PHS、PDC 、Home RF system ,etc contact us for the advanced PCB solutions about antenna designs.

Specifications

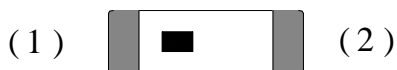
Part Number	Band Width (MHz)	Peak Gain (V-XZ)	Average Gain (V-XZ)	VSWR (In BW)	Impedance (Ohm)
SLDA52-2R540G-S1	2490-2590	2.5 dBi typ.	0.5 dBi typ	< 2.0	50
Operating Temperature Range : -40 ~ +85 °C Storage Temperature Range : -40 ~ +85 °C Power Capacity : 3 W max					

Outline and Dimensions

Unit: mm

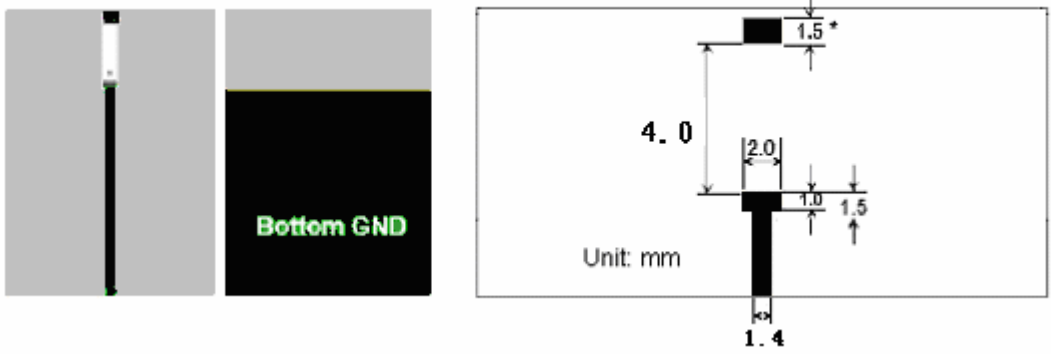


Terminal Configuration



No.	Terminal Name	No.	Terminal Name
(1)	Feeding Point	(2)	NC

EVALUATION BOARD AND LAND PATTERN

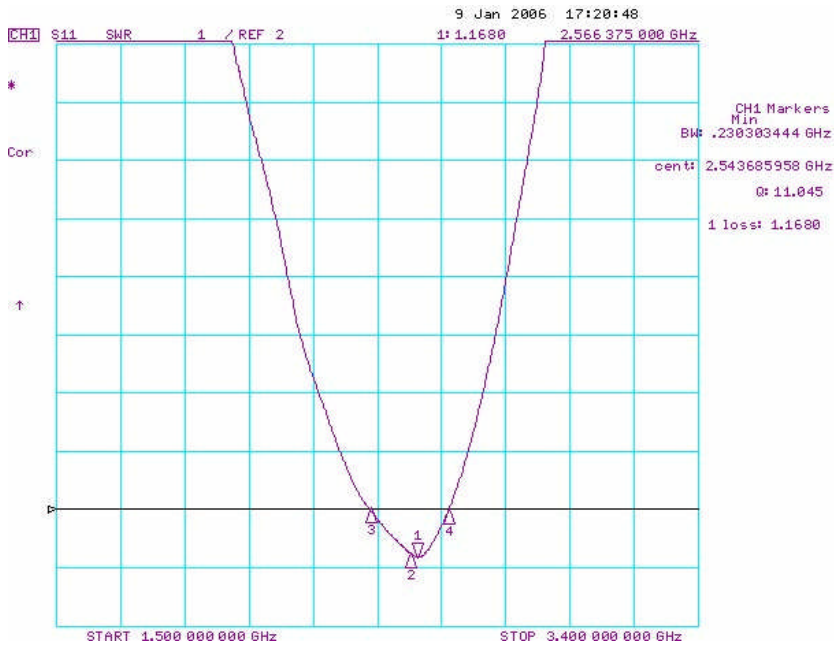


SAMPLE REQUEST

Frequency is changed with layout patterning of PCB.

Please consult with us for appropriate design.

RETURN LOSS

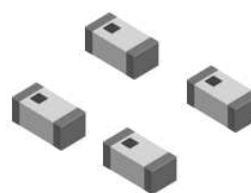


Part Number Equivalent Table

SNEC P/N	ACX P/N	Walsin P/N	Johnson P/N
SLDA52-2R540G-S1	AT5020-B2R8HAA_	RFANT5220110A0T	2450AT42A100

SLDA31-2R800G-S1

This antenna series is designed for the applications of ISM Band 2.4 GHz, just like as Bluetooth、WLAN、Home RF , etc.



Feature

Compact, Light weight ,built-in antenna with high gain , wide bandwidth and low cost.

Applications

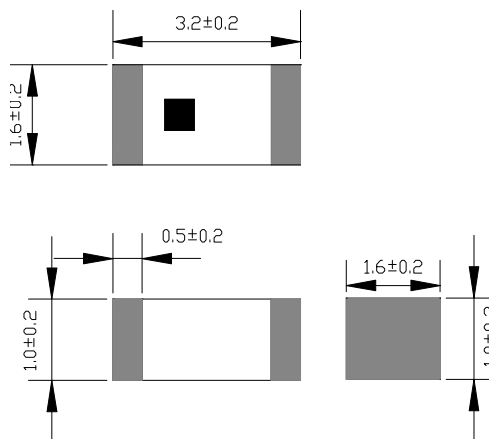
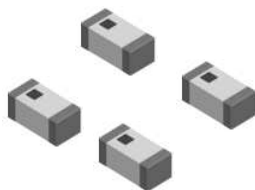
Bluetooth 、Wireless LAN、PHS、PDC、Home RF system ,etc contact us for the advanced PCB solutions about antenna designs.

Specifications

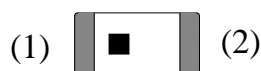
Part Number	Band Width (MHz)	Peak Gain (V-XZ)	Average Gain (V-XZ)	VSWR (In BW)	Impedance (Ohm)
SLDA31-2R800G-S1	2750~2850	0.5 dBi typ.	-0.5dBi typ	< 2.0	50
	Operating Temperature Range : -40 ~ +85 °C Storage Temperature Range : -40 ~ +85 °C Power Capacity : 3 W max				

Outline and Dimensions

Unit: mm

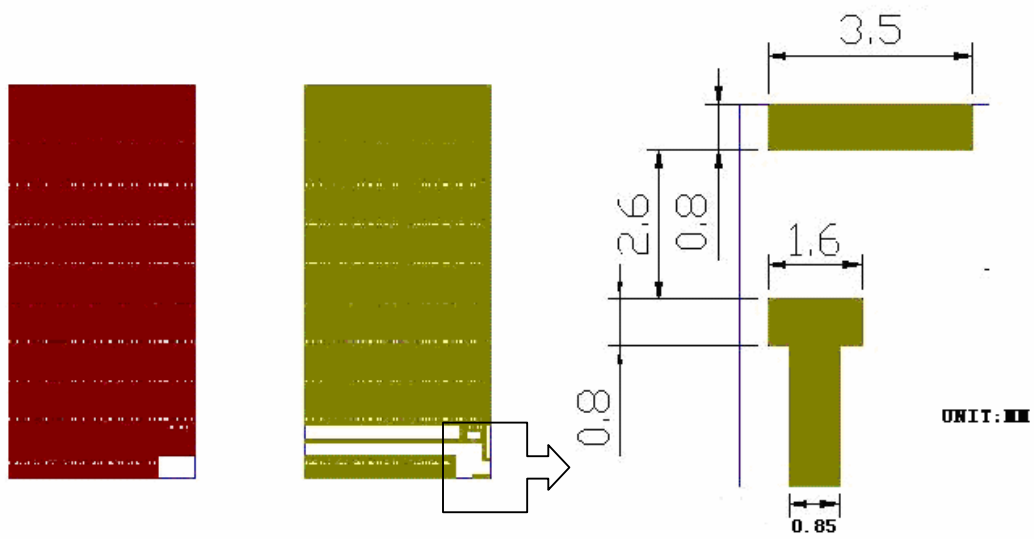


Terminal Configuration



No.	Terminal Name	No.	Terminal Name
(1)	Feeding Point	(2)	NC

EVALUATION BOARD AND LAND PATTERN

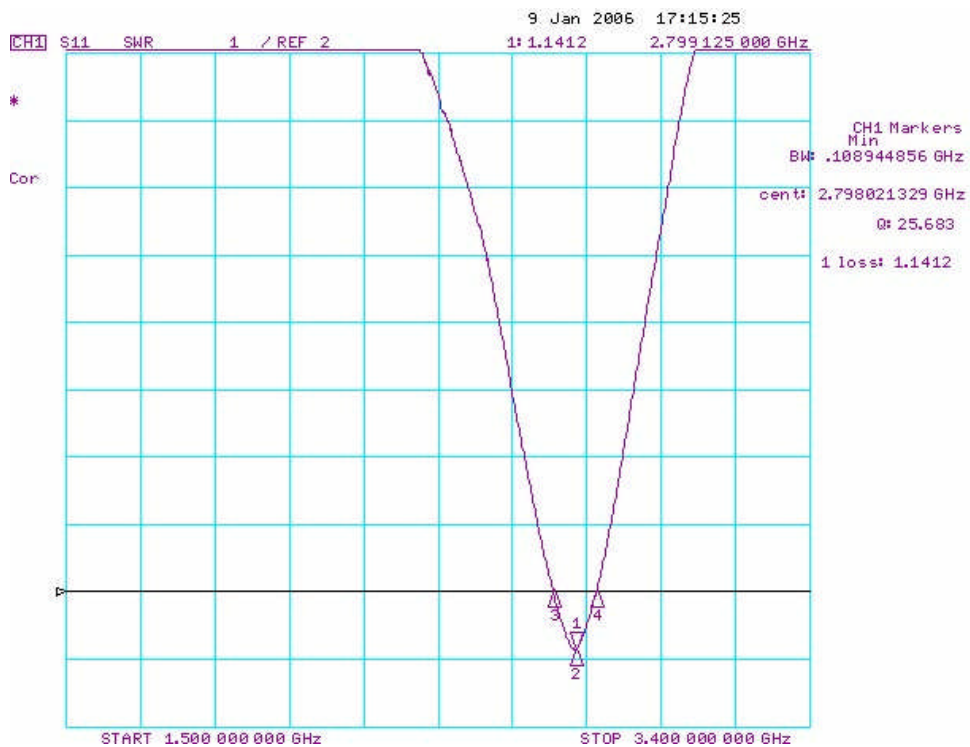


SAMPLE REQUEST

Frequency is changed with layout patterning of PCB.

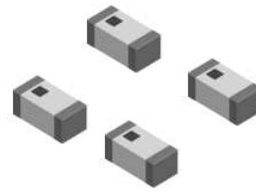
Please consult with us for appropriate design.

RETURN LOSS



SLDA31-2R870G-S1

This antenna series is designed for the applications of ISM Band 2.4 GHz, just like as Bluetooth, WLAN, Home RF , etc.



Feature

Compact, Light weight ,built-in antenna with high gain , wide bandwidth and low cost.

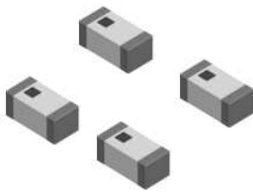
Applications

Bluetooth , Wireless LAN, PHS, PDC , Home RF system ,etc contact us for the advanced PCB solutions about antenna designs.

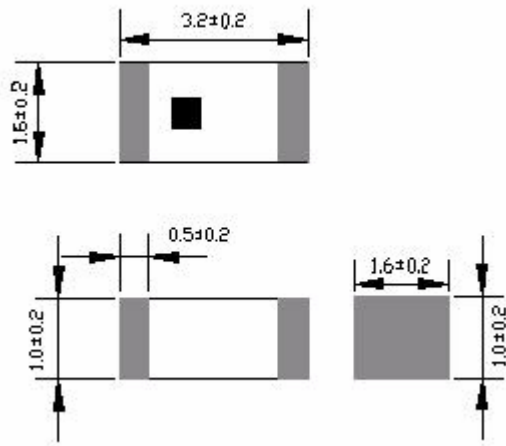
Specifications

Part Number	Band Width (MHz)	Peak Gain (V-XZ)	Average Gain (V-XZ)	VSWR (In BW)	Impedance (Ohm)
SLDA31-2R870G-S1	2820~2920	0.5 dBi typ.	-0.5dBi typ	< 2.0	50
	Operating Temperature Range : -40 ~+85 °C				
	Storage Temperature Range : -40 ~+85 °C				
Power Capacity : 3 W max					

Outline and Dimensions



Unit: mm



Terminal Configuration

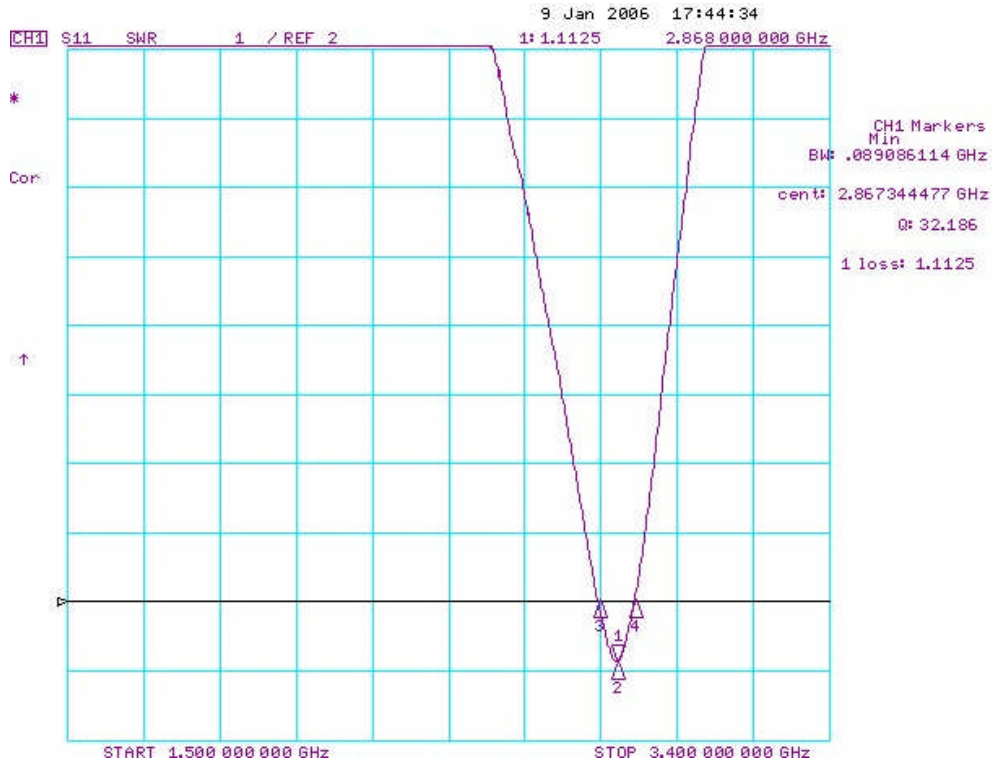


No.	Terminal Name	No.	Terminal Name
(1)	Feeding Point	(2)	NC

SAMPLE REQUEST

Frequency is changed with layout patterning of PCB.
 Please consult with us for appropriate design.

RETURN LOSS

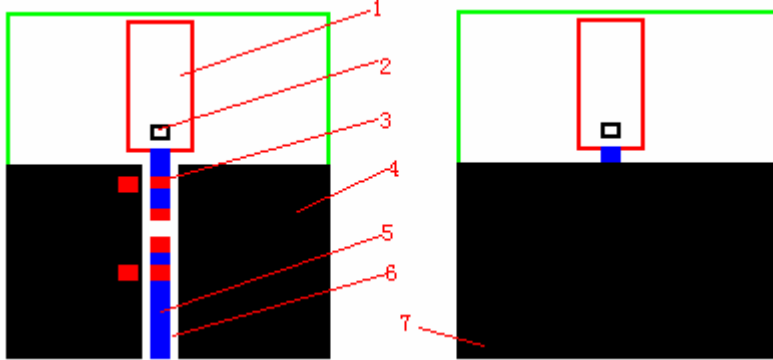


Part Number Equivalent Table

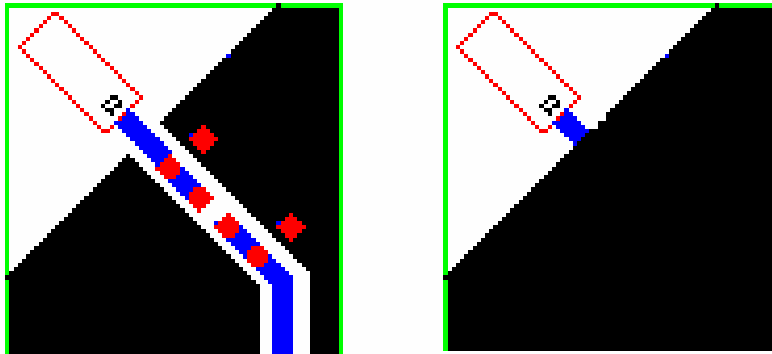
SNEC P/N	Murata P/N	ACX P/N	Johanson P/N
SLDA31-2R800G-S1 SLDA31-2R870G-S1	LDA312G7313F-237	AT3216 -B2R7HAA	2450AT18A100

SNEC CHIP ANTENNA APPLICATION GUIDE

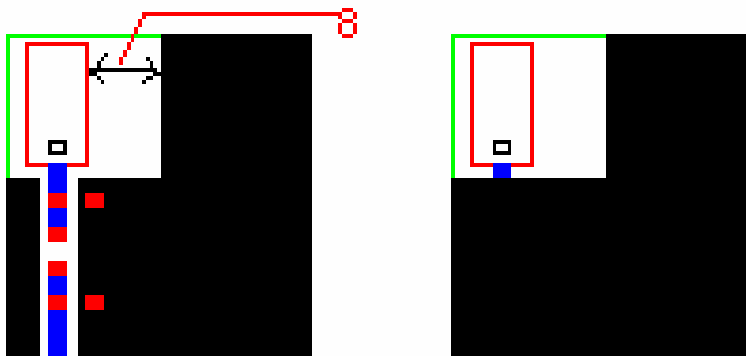
Chip antenna reference layout



Reference layout 1



Reference layout 2



Reference layout 3

- note:
- 1-----chip antenna
 - 2-----antenna feeding mark
 - 3-----solder pad for match circuit
 - 4-----top ground
 - 5-----transmission line
 - 6-----gap between transmission line and ground

7-----bottom ground

8-----for very small size antenna, gap between ANT and GND not smaller than 5mm

if the PCB have enough areas, the reference 1&2 was the better selection.

Recommendations

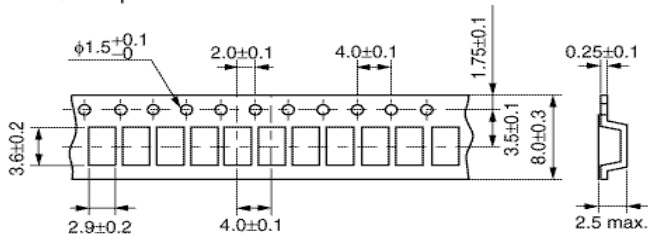
- it is often better not to reduce antenna size too much, if board space allows.
- It is also best to keep some clearance between the antenna and nearby objects. Or the tuning will be difficult and radiation pattern can be heavily distorted.
- Never place ground plane or tracks underneath the antenna
- Never place the antenna very close to metallic objects, such as batteries.
- Be careful about the wiring in the finalized product, not too close to the antenna
- A monopole antenna should have a reasonable ground plane to be efficient.
- Do the final tuning in the end product, not in free air.
- Never install a chip antenna in a vastly different layout than the reference design, and expect it to work without tuning
- Do not use a metallic enclosure or metallized plastic for the antenna
- Test the plastic casing for high RF losses, preferably before production
- Never use low-Q loading components, or change manufacturer without retesting
- Do not use very thin PCB tracks, the tracks should be fairly wide
- If calculate the feeding line impedance depending on the thickness and dielectric constant of PCB when placing layout, it will be convenient to tune the antenna.

Packaging of LTCC

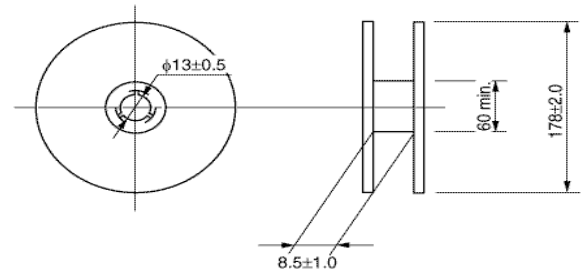
Type	Size	Standard Quantity (Pcs)
		180mm Plastic Tape
Filter	3225	3000
	3216	3000
	2520	3000
	2012	4000
Antenna	9020	4000
	5020	4000
	3216	3000
	5020	4000
	7220	4000

3225 Series

● Plastic Tape

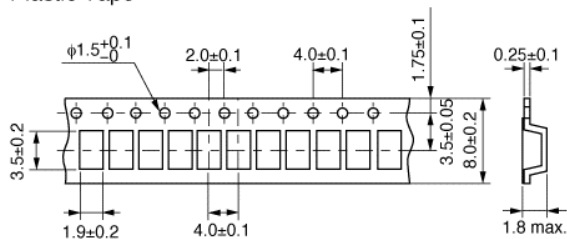


● Reel

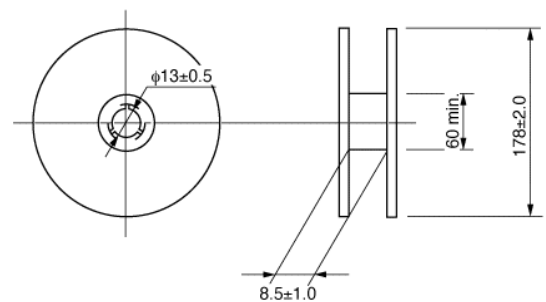


3216 Series

● Plastic Tape

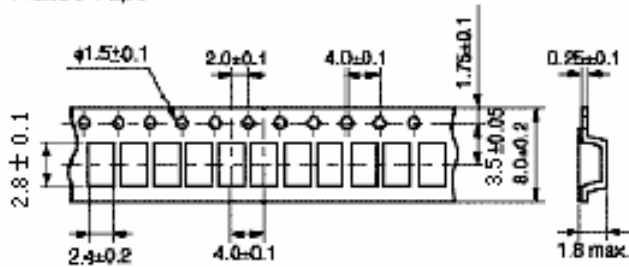


● Reel

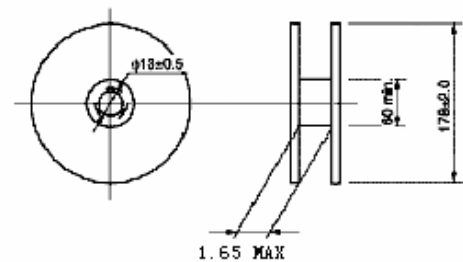


2520 Series

● Plastic Tape

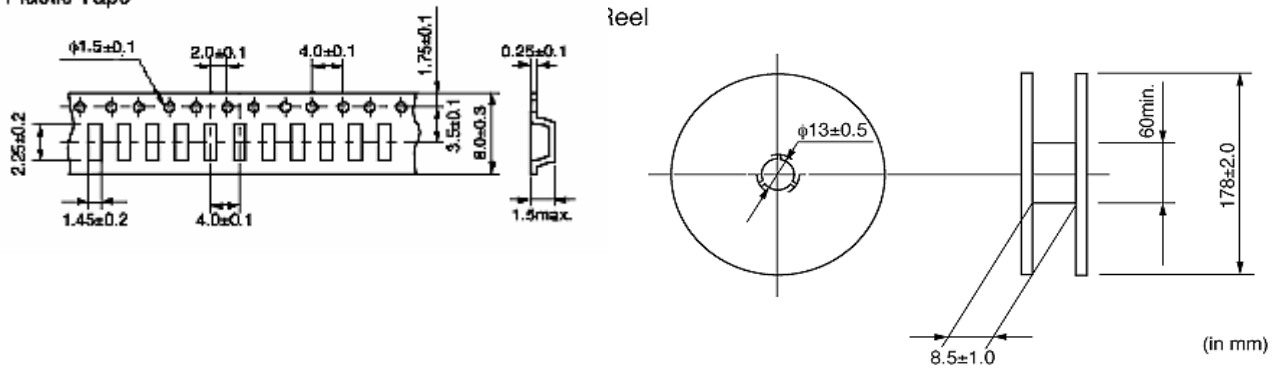


● Reel

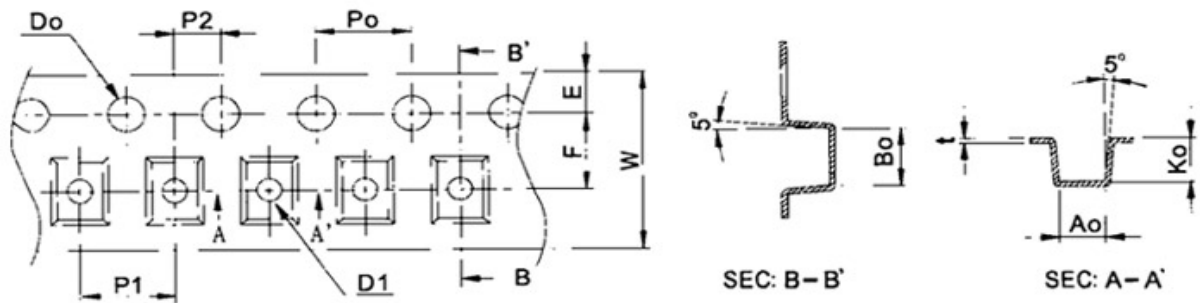


2012 Series

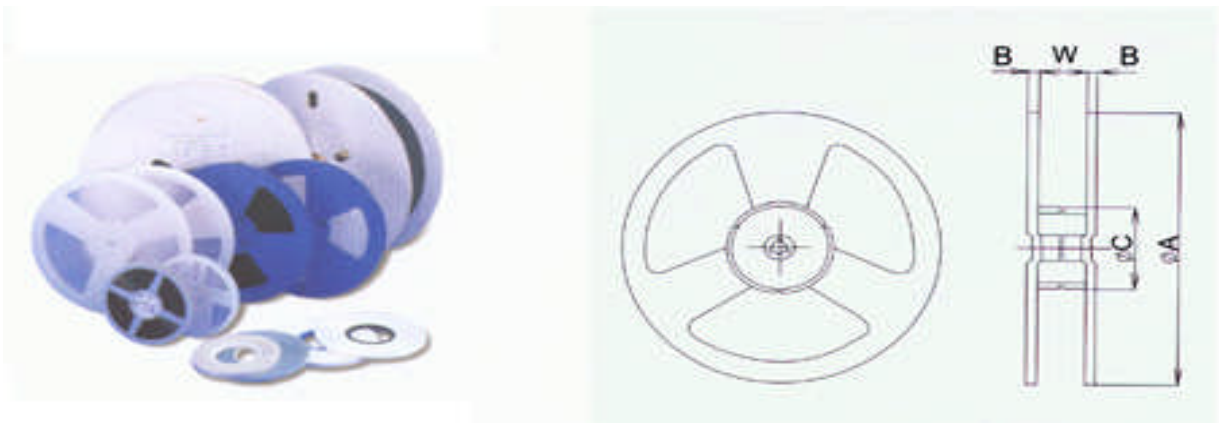
● Plastic Tape



Chip Antenna

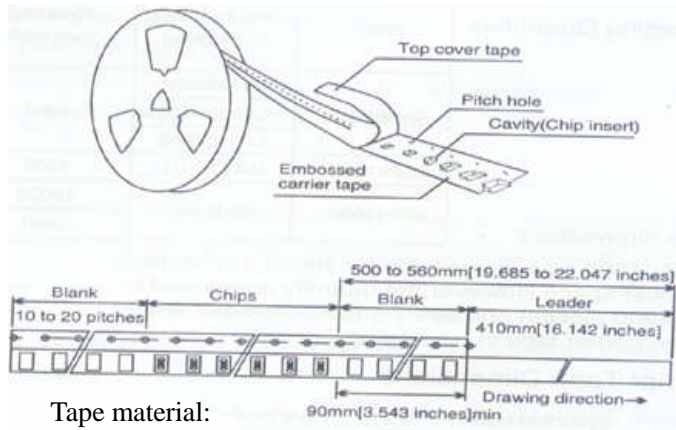


Series	W	P1	E	F	D0	D1	P0	10*P0	P2	K0	A0	B0
Tol	± 1	± 1	± 1	± 0.05	+0.1 -0.0	± 0.05	± 0.05	± 0.2	± 0.05	± 1	± 1	± 1
3216	8.0	4.0	1.75	3.5	1.50	1.0/0.5	4.0	40.0	2.0	1.4	2.0	3.6
5020	12.0	8.0		5.5		1.5				1.3	2.4	5.4
7220				1.3		2.4				7.6		
9020				16.0		12.0				7.5	1.3	2.4



series	spec.	dimensions(mm)			
		A	W	C	B
3216	7"*8mm	178	9	60	1.5
5020	13"*12mm	330	13.5	100	2.0
7220		330		100	2.0
9020	13"*16mm	330	17.5	100	2.0

Taping figure and drawing direction:



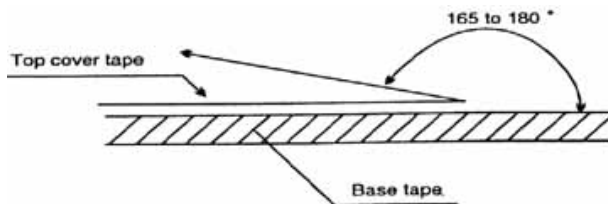
Tape material:
 Base tape: cardboard
 Cover tape: polyethylene

Pulling strength of tapes:

Carrier tape	10N or more (1kgf or more)
Cover tape	5N or more (0.5kgf or more)

Peeling strength of cover tape:

Cover tape	0.2~0.6N (20gf~60gf)
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- Test condition: 1) peel angle: 165°~180° vs. carrier tape.
 2) peel speed: 300mm/min±10%.

射频和天线设计培训课程推荐

易迪拓培训(www.edatop.com)由数名来自于研发第一线的资深工程师发起成立,致力并专注于微波、射频、天线设计研发人才的培养;我们于 2006 年整合合并微波 EDA 网(www.mweda.com),现已发展成为国内最大的微波射频和天线设计人才培养基地,成功推出多套微波射频以及天线设计经典培训课程和 ADS、HFSS 等专业软件使用培训课程,广受客户好评;并先后与人民邮电出版社、电子工业出版社合作出版了多本专业图书,帮助数万名工程师提升了专业技术能力。客户遍布中兴通讯、研通高频、埃威航电、国人通信等多家国内知名公司,以及台湾工业技术研究院、永业科技、全一电子等多家台湾地区企业。

易迪拓培训课程列表: <http://www.edatop.com/peixun/rfe/129.html>



射频工程师养成培训课程套装

该套装精选了射频专业基础培训课程、射频仿真设计培训课程和射频电路测量培训课程三个类别共 30 门视频培训课程和 3 本图书教材;旨在引领学员全面学习一个射频工程师需要熟悉、理解和掌握的专业知识和研发设计能力。通过套装的学习,能够让学员完全达到和胜任一个合格的射频工程师的要求...

课程网址: <http://www.edatop.com/peixun/rfe/110.html>

ADS 学习培训课程套装

该套装是迄今国内最全面、最权威的 ADS 培训教程,共包含 10 门 ADS 学习培训课程。课程是由具有多年 ADS 使用经验的微波射频与通信系统设计领域资深专家讲解,并多结合设计实例,由浅入深、详细而又全面地讲解了 ADS 在微波射频电路设计、通信系统设计和电磁仿真设计方面的内容。能让您在最短的时间内学会使用 ADS,迅速提升个人技术能力,把 ADS 真正应用到实际研发工作中去,成为 ADS 设计专家...



课程网址: <http://www.edatop.com/peixun/ads/13.html>



HFSS 学习培训课程套装

该套课程套装包含了本站全部 HFSS 培训课程,是迄今国内最全面、最专业的 HFSS 培训教程套装,可以帮助您从零开始,全面深入学习 HFSS 的各项功能和在多个方面的工程应用。购买套装,更可超值赠送 3 个月免费学习答疑,随时解答您学习过程中遇到的棘手问题,让您的 HFSS 学习更加轻松顺畅...

课程网址: <http://www.edatop.com/peixun/hfss/11.html>

CST 学习培训课程套装

该培训套装由易迪拓培训联合微波 EDA 网共同推出,是最全面、系统、专业的 CST 微波工作室培训课程套装,所有课程都由经验丰富的专家授课,视频教学,可以帮助您从零开始,全面系统地学习 CST 微波工作的各项功能及其在微波射频、天线设计等领域的设计应用。且购买该套装,还可超值赠送 3 个月免费学习答疑...

课程网址: <http://www.edatop.com/peixun/cst/24.html>



HFSS 天线设计培训课程套装

套装包含 6 门视频课程和 1 本图书,课程从基础讲起,内容由浅入深,理论介绍和实际操作讲解相结合,全面系统的讲解了 HFSS 天线设计的全过程。是国内最全面、最专业的 HFSS 天线设计课程,可以帮助您快速学习掌握如何使用 HFSS 设计天线,让天线设计不再难...

课程网址: <http://www.edatop.com/peixun/hfss/122.html>

13.56MHz NFC/RFID 线圈天线设计培训课程套装

套装包含 4 门视频培训课程,培训将 13.56MHz 线圈天线设计原理和仿真设计实践相结合,全面系统地讲解了 13.56MHz 线圈天线的工作原理、设计方法、设计考量以及使用 HFSS 和 CST 仿真分析线圈天线的具体操作,同时还介绍了 13.56MHz 线圈天线匹配电路的设计和调试。通过该套课程的学习,可以帮助您快速学习掌握 13.56MHz 线圈天线及其匹配电路的原理、设计和调试...

详情浏览: <http://www.edatop.com/peixun/antenna/116.html>



我们的课程优势:

- ※ 成立于 2004 年,10 多年丰富的行业经验,
- ※ 一直致力并专注于微波射频和天线设计工程师的培养,更了解该行业对人才的要求
- ※ 经验丰富的一线资深工程师讲授,结合实际工程案例,直观、实用、易学

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- ※ 微波 EDA 网: <http://www.mweda.com>
- ※ 官方淘宝店: <http://shop36920890.taobao.com>