



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



"High Frequency Ceramic Solutions"

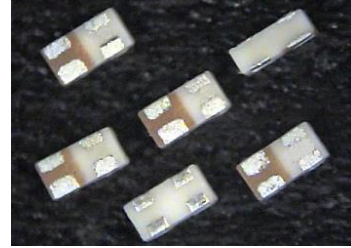
5.1 to 5.9 GHz, micro antenna optimized for PCB edge mount. Great for WiFi P/N 5500AT07A0900 and V2V (Vehicle to Vehicle communications)

Detail Specification: 10/30/2014

Page 1 of 4

General Specifications

Part Number	5500AT07A0900*			
Frequency (MHz)	5150 ~ 5850	5350 ~ 5900		
Peak Gain (dBi typ.)	0.0 (YZ-Total)	1.0 (YZ-Total)		
Average Gain (dBi typ.)	-3.0 (YZ-Total)	-1.5 (YZ-Total)		
Return Loss	6.0 dB max.	3.0 dB max.		
Power Capacity	2W max. (CW)			
Operating Temperature	-40 ~ +85 °C		Unused product (on T&R)	+5 ~ +35 °C, Humidity
Storage Temperature	-40 ~ +85 °C		recommended storage conditions	45~75%RH
Q'ty/Reel (pcs)	10,000 pcs		Storage Period	18 months max.



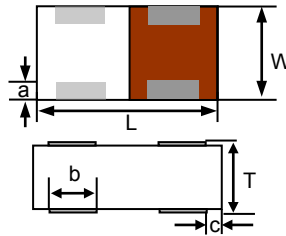
*AEC-Q200 qualifiable component.

Part Number Explanation

P/N Suffix	Packaging Style	Bulk (loose)	Suffix = S	Eg. 5500AT07A0900S
		T & R (₁₀₀₀₀ pcs)	Suffix = T	Eg. 5500AT07A0900T
	Termination	100% Tin	Suffix = None	Eg. 5500AT07A0900(T or S)
	Evaluation Board	5500AT07A0900-EB1SMA (pre-tuned 50ohms with female SMA connector)		

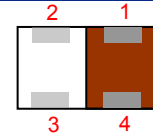
Mechanical Dimensions

	In	mm
L	0.039 ± 0.004	1.00 ± 0.10
W	0.020 ± 0.004	0.50 ± 0.10
T	0.014 Max.	0.37 Max.
a	0.006 +.004/-0.006	0.15 +0.1/-0.05
b	0.010 +.004/-0.006	0.25 +0.1/-0.05
c	0.003 +.004/-0.006	0.08 +0.1/-0.05

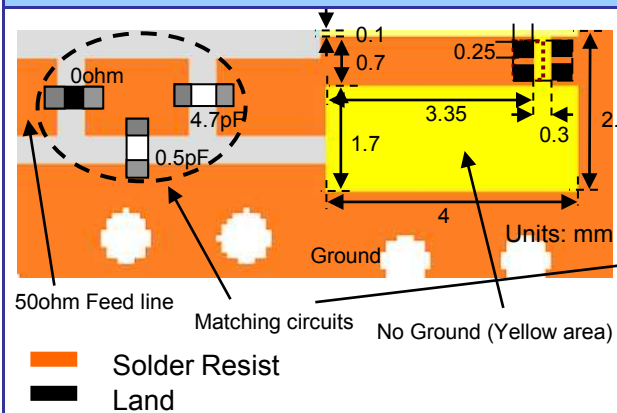


Terminal Configuration

No.	Function	No.	Function
1	Feed	3	GND
2	GND	4	Feed



Recommended PCB Pattern



•Attention: Matching circuits and component values will be different on the client's design, depending on PCB layout, geometry, etc. It is recommended that the designer leave available slots for a "pi" (or shunt-series-shunt) network. The antenna matching network values you see here are used when antenna is mounted on Johanson's evaluation board.

• Need help laying out the antenna, want us to review the design (free!), require the Gerber files for this EVB, or would like us to obtain the new tuning values of your PCB (fee may apply)? Go to: www.johansontechnology.com/component/techquestion

• More antenna support info at: www.johansontechnology.com/ipcantennaservices

Johanson Technology, Inc. reserves the right to make design changes without notice.

All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com

4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

Ver 1.0

2014 Johanson Technology, Inc. All Rights Reserved

"High Frequency Ceramic Solutions"

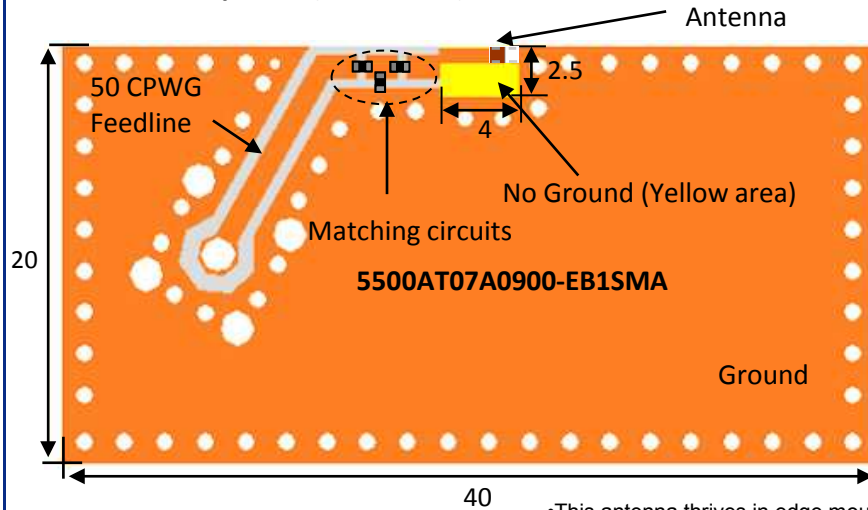
5.1 to 5.9 GHz, micro antenna optimized for PCB edge mount. Great for WiFi P/N 5500AT07A0900 and V2V (Vehicle to Vehicle communications)

Detail Specification: 10/30/2014

Page 2 of 4

Johanson Evaluation Board Dimension and Characteristics of the antenna design

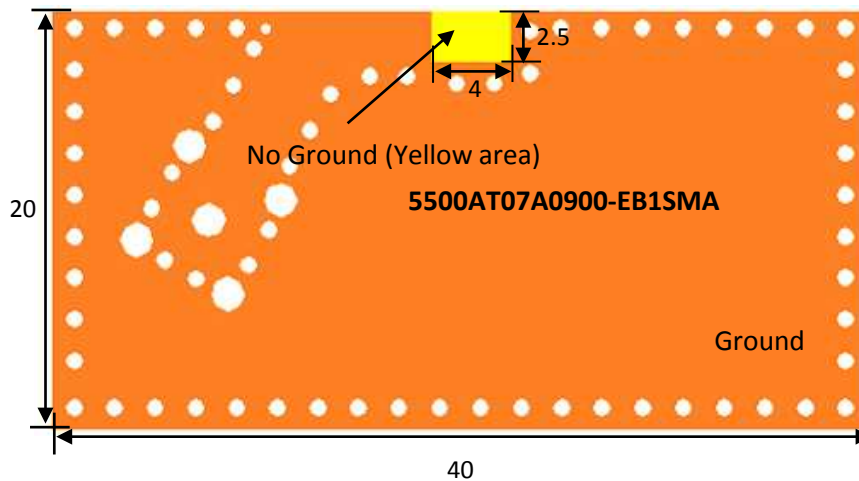
Test Board-Top View (Unit in mm)



EVB Orderable p/n:
5500AT07A0900-EB1SMA

•This antenna thrives in edge mount, middle of the PCB placements. It may also be placed at corners, the operation won't be at its full potential though. We have corner-specific 5GHz antennas here: www.johansontechnology.com/antennas

Test Board-Bottom View (Units in mm)



EVB Orderable p/n:
5500AT07A0900-EB1SMA

Johanson Technology, Inc. reserves the right to make design changes without notice.

All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com
4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

Ver 1.0

2014 Johanson Technology, Inc. All Rights Reserved

"High Frequency Ceramic Solutions"

5.1 to 5.9 GHz, micro antenna optimized for PCB edge mount. Great for WiFi P/N 5500AT07A0900 and V2V (Vehicle to Vehicle communications)

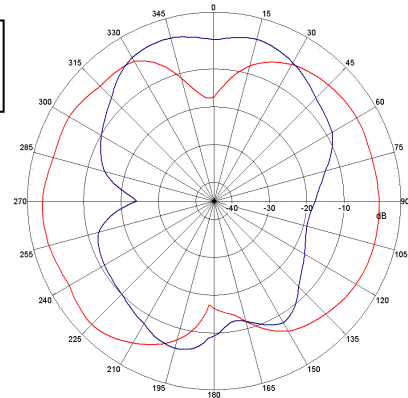
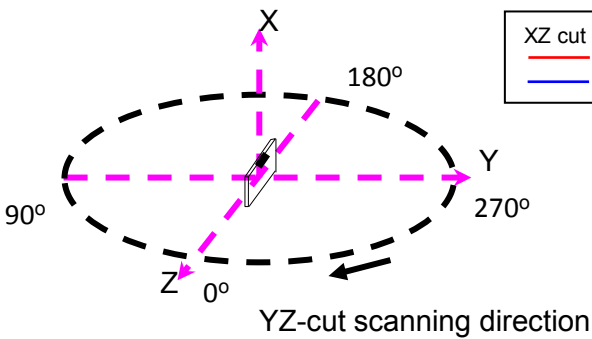
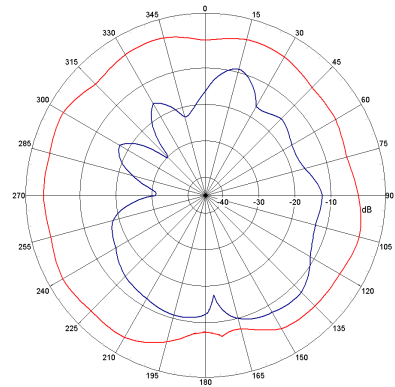
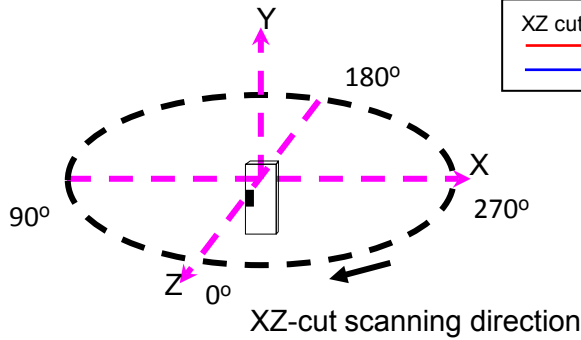
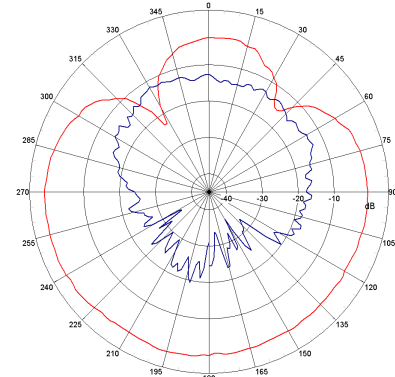
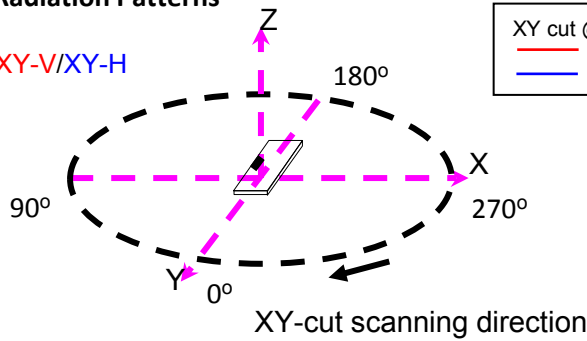
Detail Specification: 10/30/2014

Page 3 of 4

Typical Radiation Patterns @25°C

Radiation Patterns

XY-V/XY-H



Johanson Technology, Inc. reserves the right to make design changes without notice.
All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com
4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

Ver 1.0

2014 Johanson Technology, Inc. All Rights Reserved

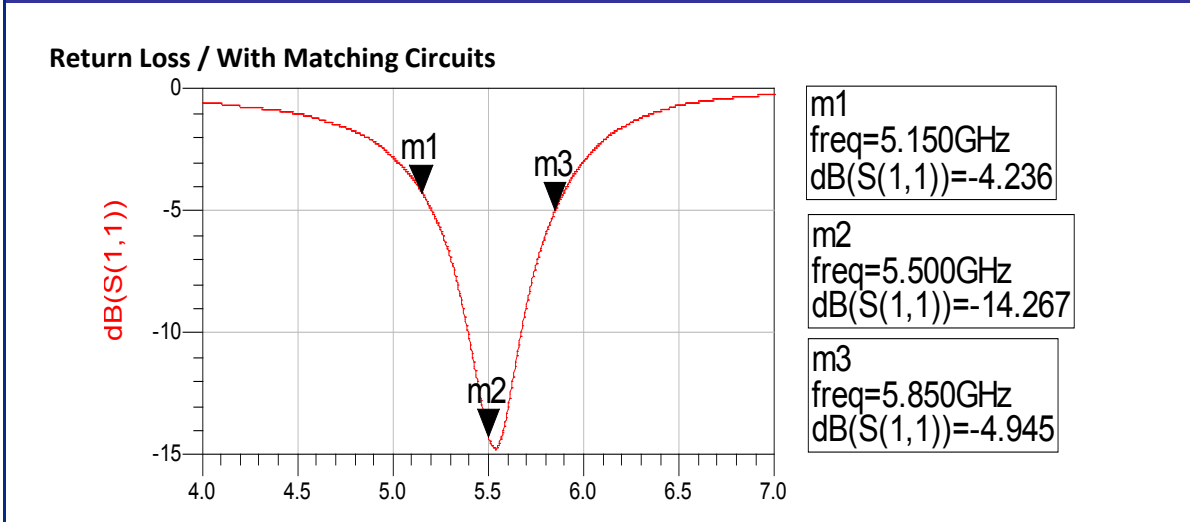
"High Frequency Ceramic Solutions"

5.1 to 5.9 GHz, micro antenna optimized for PCB edge mount. Great for WiFi and V2V (Vehicle to Vehicle communications) P/N 5500AT07A0900

Detail Specification: 10/30/2014

Page 4 of 4

Typical Electrical Performance (T=25°C)



Packaging information

www.johansontechnology.com/ipcpackaging.html

Soldering Information

www.johansontechnology.com/ipcsoldering-profile

Antenna layout and tuning techniques (How to obtain the new antenna matching values)

www.johansontechnology.com/tuning

Antenna layout review, tuning, and characterization services

www.johansontechnology.com/ipcantennaservices

For layout review contact our Applications Team at:

www.johansontechnology.com/component/techquestion

RoHS Compliance

www.johansontechnology.com/technical-notes/rohs-compliance.html

MSL Info

www.johansontechnology.com/technical-notes/msl-rating.html

Johanson Technology, Inc. reserves the right to make design changes without notice.

All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com
4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821
Ver 1.0 2014 Johanson Technology, Inc. All Rights Reserved