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"

403 MHz - MICS - Internal SMD Chip Antenna — P/N 0403AT62A0003

Detail Specification: 3/10/2013

Recommended for Medical Applications

General Specifications

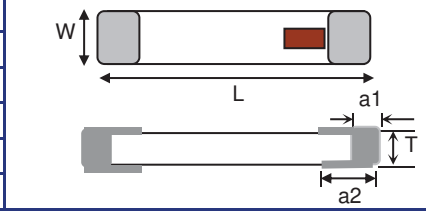
Part Number	0403AT62A0003	**Input Power**	2W max.
Frequency Range	402 - 405 MHz	**Reel Quantity**	500
Peak Gain (YZ-total)	0.0 dBi typ.	**Operating Temperature**	-40 to +85°C
Average Gain (YZ-total)	-5.0 dBi typ.	**Recommneded Storage Conditions**	+5 ~ +35 °C, Humidity 45~75%RH, 18 mos. max
Return Loss	9.5 dB min.		
Impedance	50 Ω	**Power Capacity**	2W max (CW)

Part Number Explanation

P/N Suffix	**Packing Style**	Bulk	Suffix = S	eg. 0403AT62A0003S
		T & R	Suffix = T	eg. 0403AT62A0003E
		100% Tin	Suffix = None	eg. 0403AT62A0003(E or S)
	Evaluation Board	SMA	Suffix = -EB1SMA	eg. 0403AT62A0003-EB1SMA

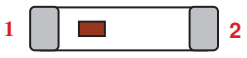
Mechanical Dimensions

	In	mm
L	0.984 ± 0.008	25.00 ± 0.20
W	0.197 ± 0.008	5.00 ± 0.20
T	0.047 ± 0.004	1.20 ± 0.10
a	0.020 ± 0.008	0.50 ± 0.20
a2	0.039 ± 0.008	1.00 ± 0.20



Terminal Configuration

No.	Function
1	Feeding Point
2	NC*



For Antenna layout and tuning app note go to: http://johansontechnology.com/tuning

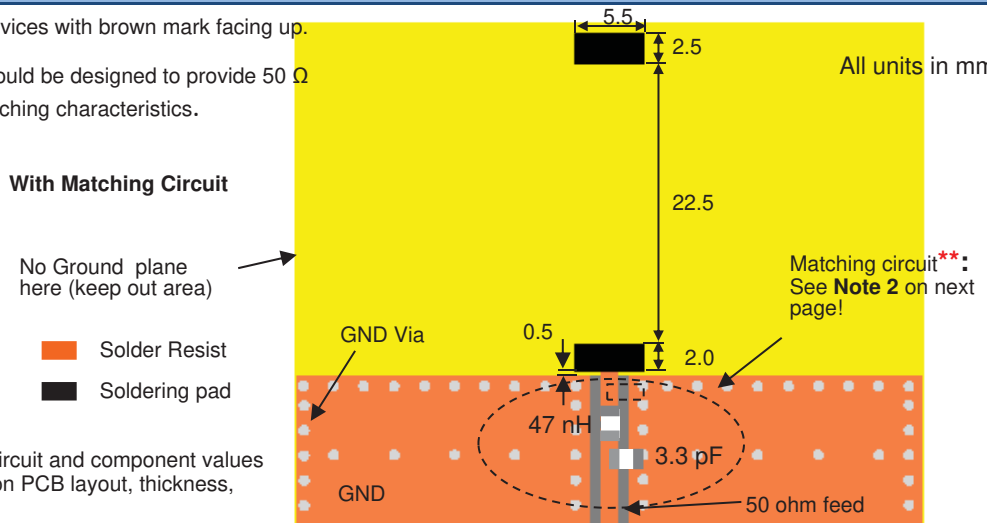
*Used only for anchoring on PCB

Mounting/Layout Considerations

Mount these devices with brown mark facing up.

**Line width should be designed to provide 50 Ω impedance matching characteristics.

With Matching Circuit



**matching circuit and component values will depend on PCB layout, thickness, material, etc.

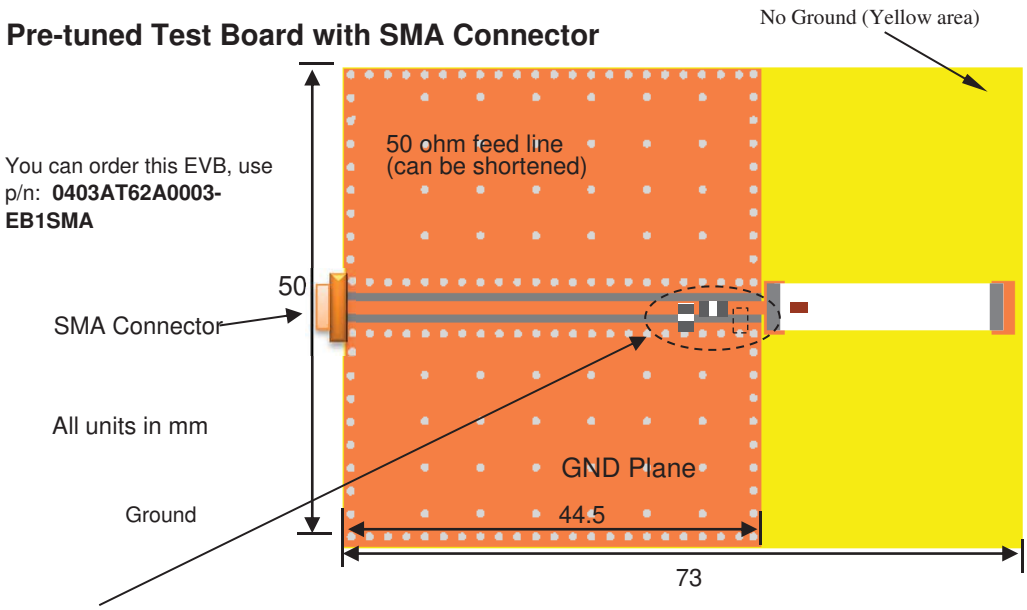
JOHANSON TECHNOLOGY

www.johansontechnology.com

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

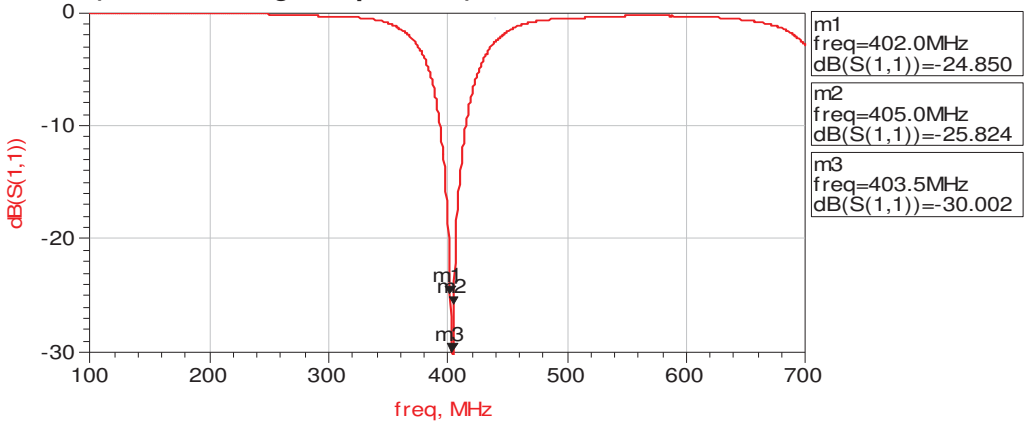
Test EVB used to obtain return loss, gain, and readiation patterns

Pre-tuned Test Board with SMA Connector



Note 2: It is recommended that the designer leave available slots for a "pi" (or shunt-series-shunt) network. The antenna matching network values above are used when antenna is monted on Johanson's evaluation board. The matching values on clinet's PCB will be different.
Go to: http://johansontechnology.com/tuning and see how to obtain the new values. If you need further help, contact our RF Applications Eng Team at:
http://www.johansontechnology.com/en/ask-a-technical-question.html

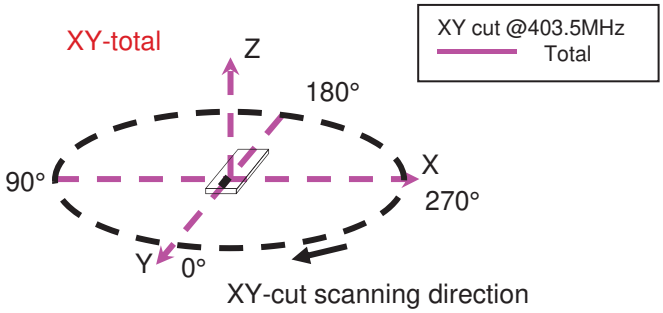
Return Loss (with matching components)

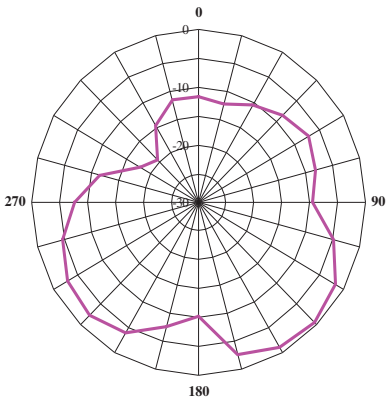


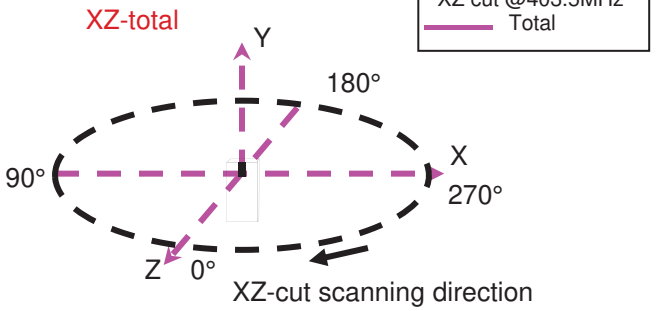
403 MHz - MICS - Internal SMD Chip Antenna **P/N 0403AT62A0003**

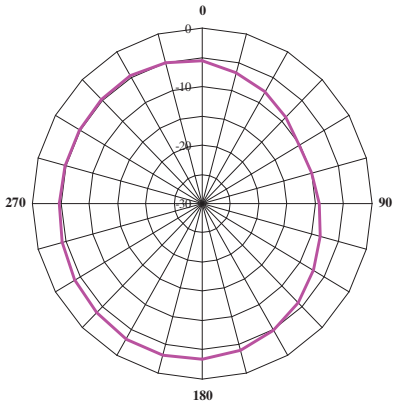
Detail Specification: 3/10/2013

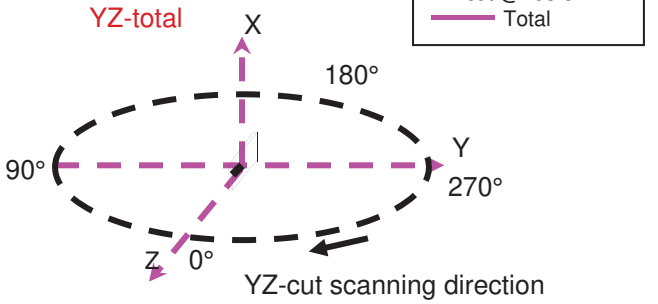
Test EVB used to obtain return loss, gain, and readiation patterns

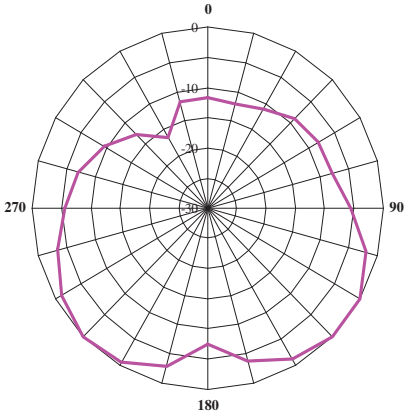












JOHANSON TECHNOLOGY
www.johansontechnology.com
4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821