"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

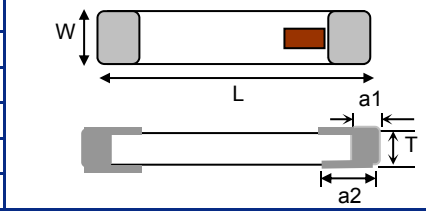
Part Number	0403AT62A0003	**Input Power**	2W max.
Frequency Range	402 - 405 MHz	**Reel Quantity**	500
Peak Gain (YZ-total)	0.0 dBi typ.	**Operating Temperature**	-40 to +85°C
Average Gain (YZ-total)	-5.0 dBi typ.	**Recommneded Storage Conditions**	+5 ~ +35 °C, Humidity 45~75%RH, 18 mos. max
Return Loss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

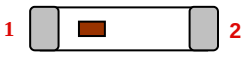
Mechanical Dimensions

	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

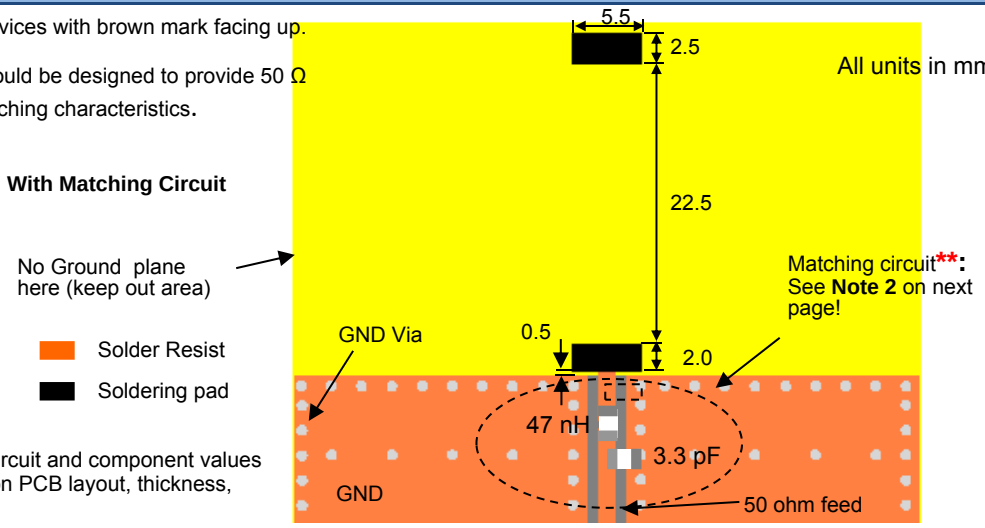
*Used only for anchoring on PCB

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

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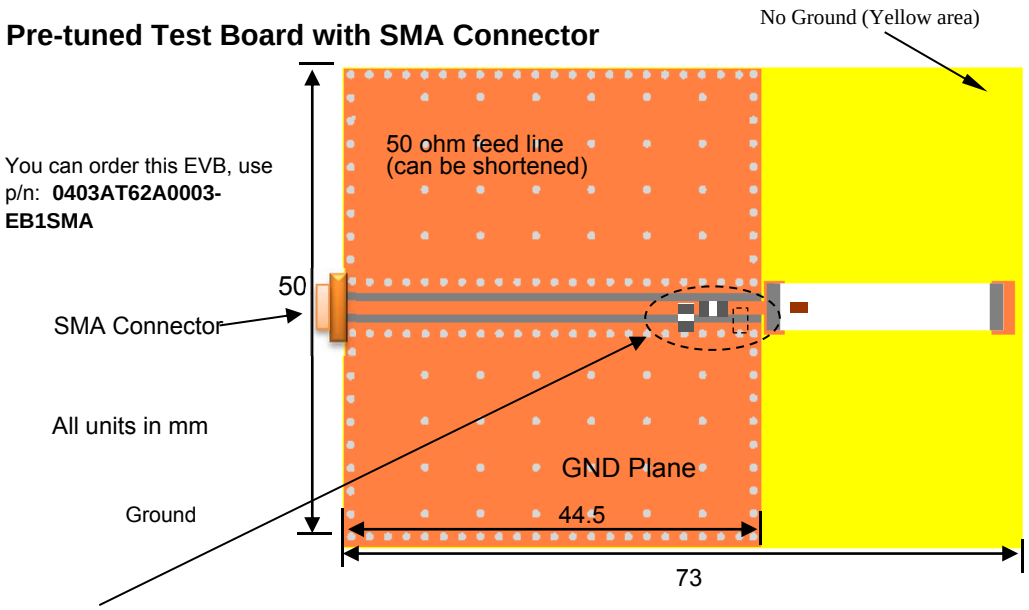
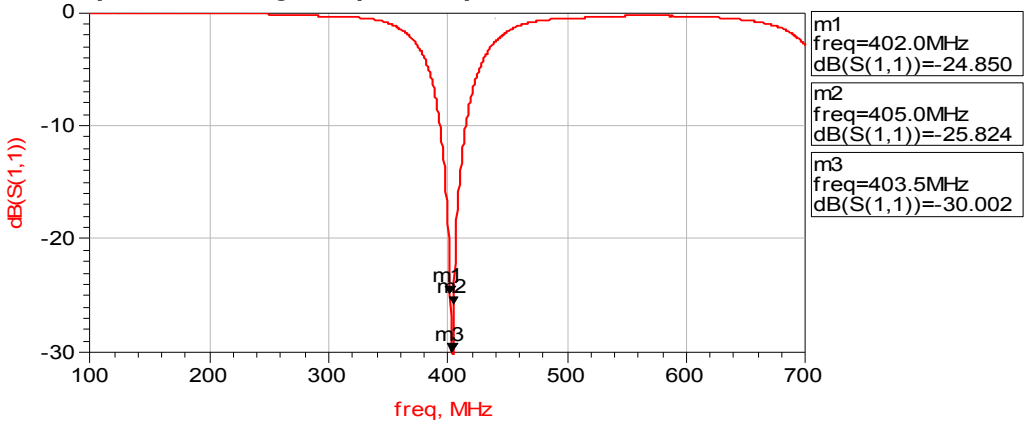
Test EVB used to obtain return loss, gain, and readiation patterns

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)



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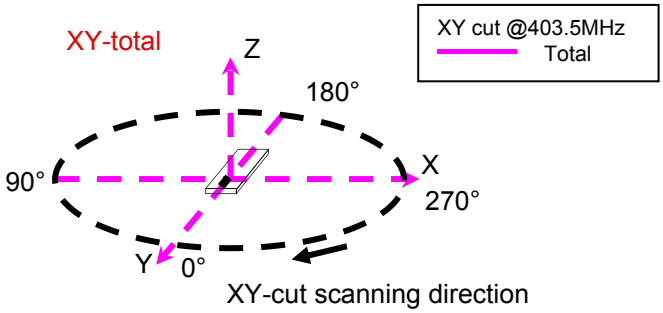

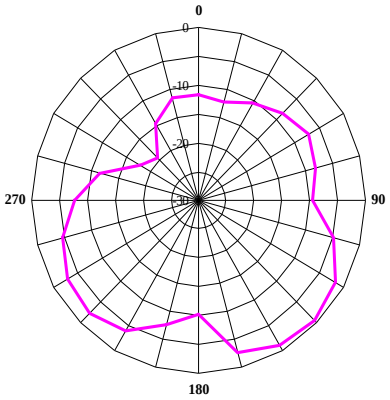

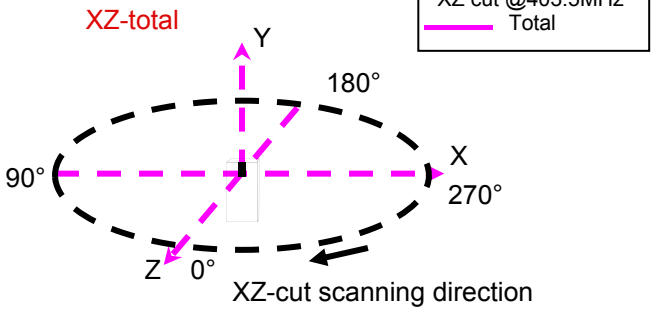

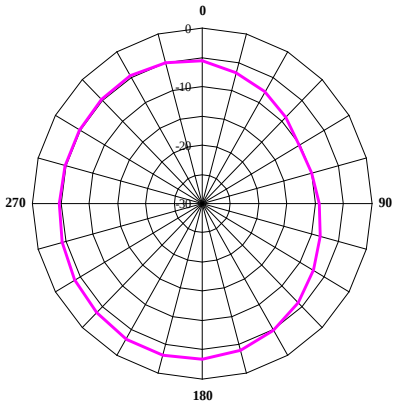

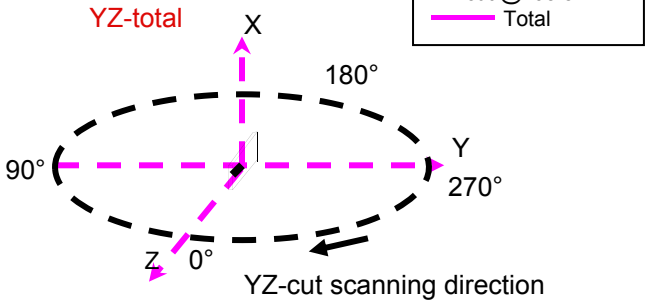

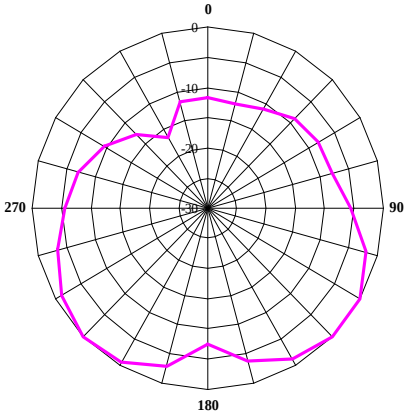

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