

High Frequency Ceramic Solutions

875 MHz SPT4 GSM Antenna Switch Module

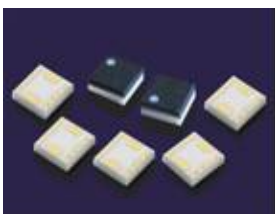
P/N 0875AS43A1850

Detail Specification: 01/23/09

Page 1 of 4

General Specifications

Part Number	0875AS43A1850
-------------	---------------



Reel Quantity	2,000
Operating Temperature	-30 to +85°C
Storage Temperature	+5 ~ +35°C, Humidity 45~75%RH, 6 mos. Max

			GSM850/900 Band	GSM1800/1900 Band
Tx Mode	Frequency (MHz)		824-849 / 880-915MHz	1710-1785/1850-1910MHz
	Insertion Loss	Tx - ANT	1.6 dB max.	1.9 dB max.
	Return Loss	Tx & ANT	10 dB min.	10 dB min.
	Attenuation	Tx - ANT	30 dB min. @ 2 × f _o MHz	23 dB min. @ 2 × f _o MHz
			26 dB min. @ 3 × f _o MHz	22 dB min. @ 3 × f _o MHz
	Isolation	Tx - Rx	21 dB min.	16 dB min.
	Current Consumption		10 mA max.	10 mA max.
Power Capacity		35 dBm typ.	33 dBm typ.	
Rx Mode	Frequency (MHz)		869-894 / 925-960 MHz	1805-1880/1930-1990MHz
	Insertion Loss	ANT - Rx	1.2 dB max.	1.5 dB max.
	Return Loss	Rx & ANT	10 dB min.	10 dB min.
	Isolation	Tx - ANT	21 dB min.	21 dB min.

Control Voltage Application

Mode	Vc1	Vc2	Current
GSM850/900-Tx	2.4 - 2.8 V	0 - 0.1 V	10 mA max.
GSM850/900-Rx	0 - 0.1 V	0 - 0.1 V	--
GSM1800/1900-Tx	0 - 0.1 V	2.4 - 2.8 V	10 mA max.
GSM1800/1900-Rx	0 - 0.1 V	0 - 0.1 V	--

Terminal Configuration

No	Function	No	Function
1	GSM1800/1900-Rx	7	GSM850/900-Tx
2	NC	8	GND
3	GSM850/900-Rx	9	ANT
4	Vc1	10	Vc2
5	GSM1800/1900-Tx	11	NC
6	GND	12	GND

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

2009 Johanson Technology, Inc. All Rights Reserved

High Frequency Ceramic Solutions

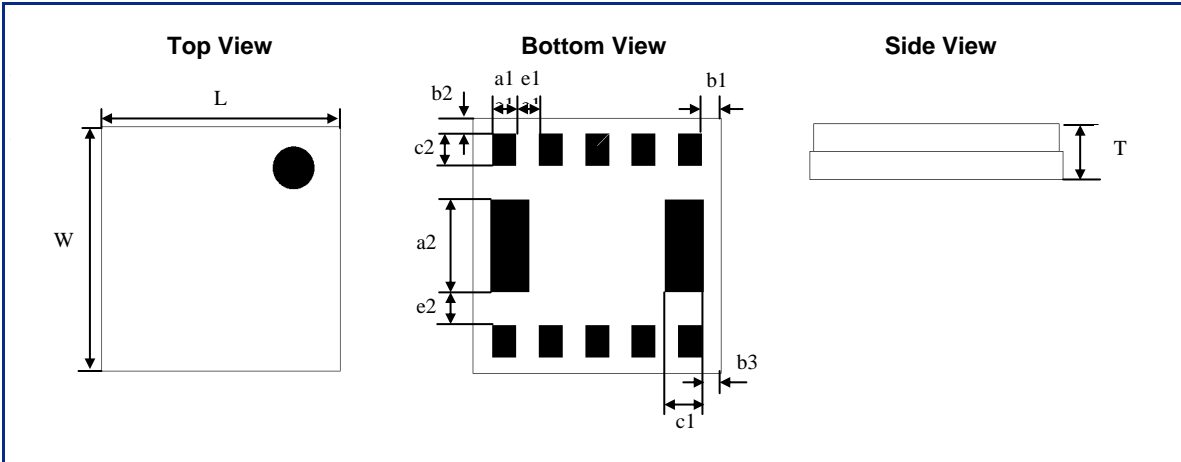
875 MHz SPT4 GSM Antenna Switch Module

P/N 0875AS43A1850

Detail Specification: 01/23/09

Page 2 of 4

Mechanical Dimensions



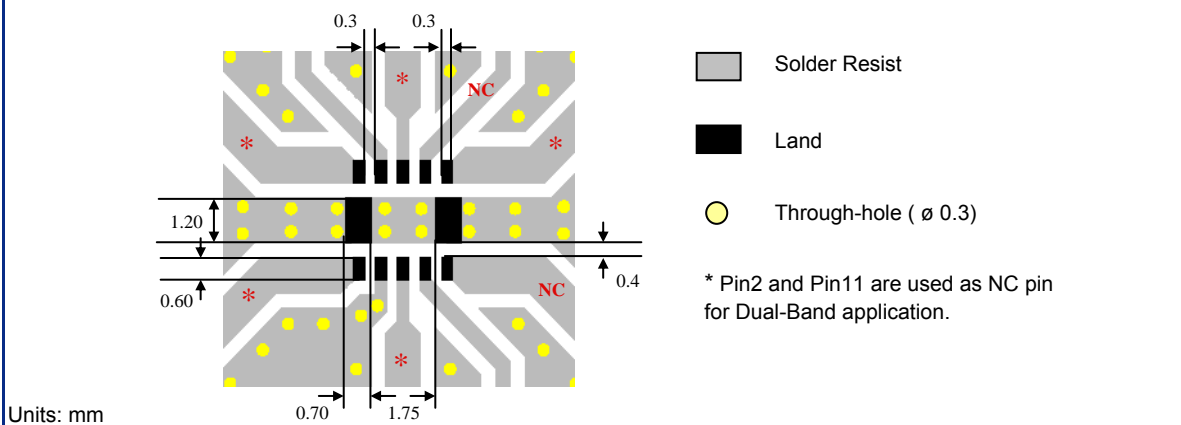
	In	mm
L	0.126 ± 0.008	3.20 ± 0.20
W	0.126 ± 0.008	3.20 ± 0.20
T	0.055 max.	1.4 max.
a1	0.012 ± 0.004	0.30 ± 0.10
a2	0.047 ± 0.004	1.20 ± 0.10
b1	0.010 ± 0.008	0.25 ± 0.20

	In	mm
b2	0.008 ± 0.008	0.20 ± 0.20
b3	0.008 ± 0.008	0.20 ± 0.20
c1	0.020 ± 0.004	0.50 ± 0.10
c2	0.016 ± 0.004	0.40 ± 0.10
e1	0.012 ± 0.004	0.30 ± 0.10
e2	0.016 ± 0.004	0.40 ± 0.10

Mounting Considerations

Mount these devices with brown mark facing up.

* Line width should be designed to provide 50 Ω impedance matching characteristics, depending on PCB material and thickness



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

2009 Johanson Technology, Inc. All Rights Reserved

High Frequency Ceramic Solutions

875 MHz SPT4 GSM Antenna Switch Module

P/N 0875AS43A1850

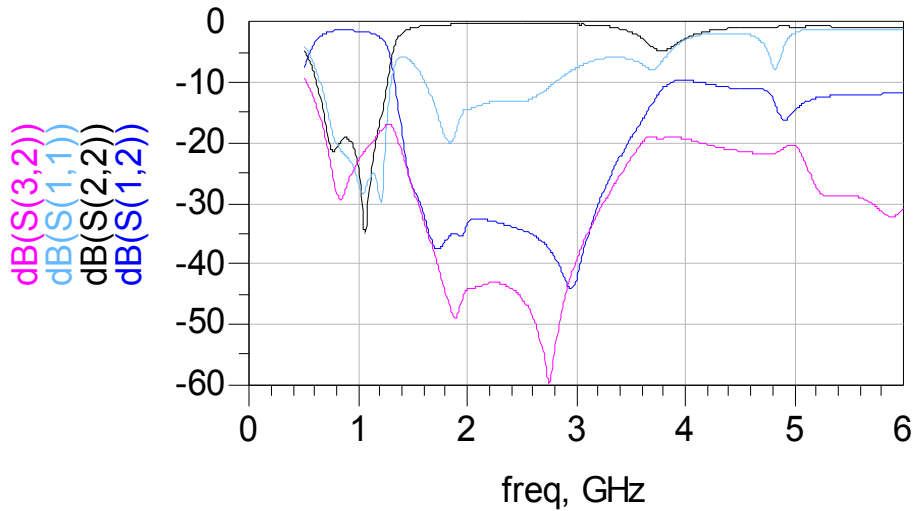
Detail Specification: 01/23/09

Page 3 of 4

Typical Electrical Performance (T=25°C)

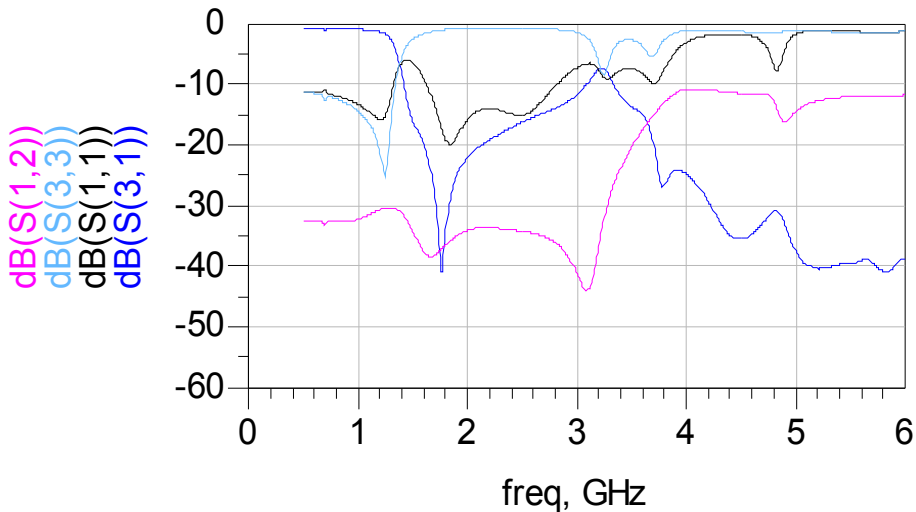
GSM850/900-Tx Mode:

(Port1 : Ant, Port2 : Tx, Port3 : Rx)



GSM850/900-Rx Mode:

(Port1 : Ant, Port2 : Tx, Port3 : Rx)



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

2009 Johanson Technology, Inc. All Rights Reserved

High Frequency Ceramic Solutions

875 MHz SPT4 GSM Antenna Switch Module

P/N 0875AS43A1850

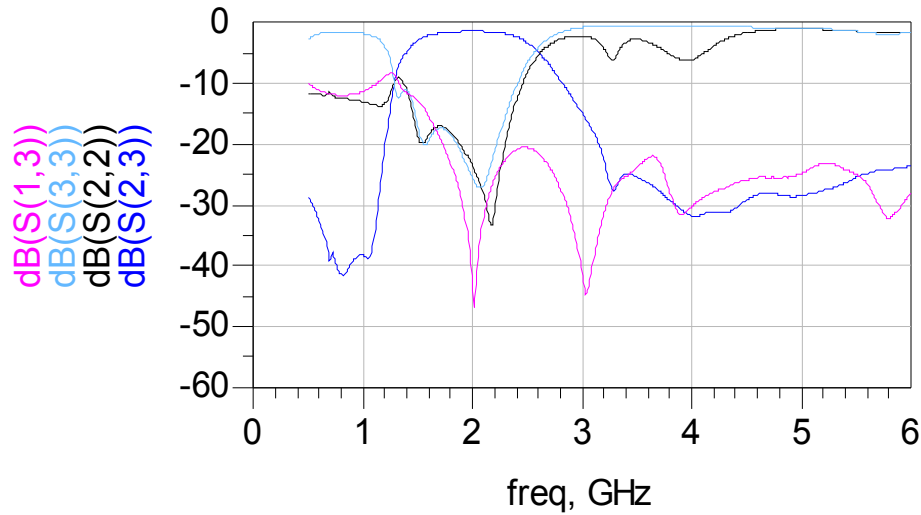
Detail Specification: 01/23/09

Page 4 of 4

Typical Electrical Performance (T=25°C)

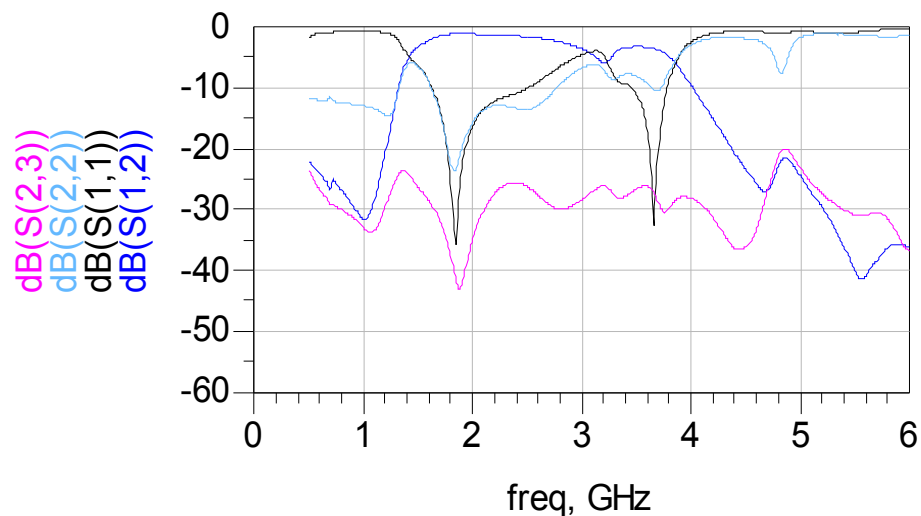
GSM1800/1900-Tx Mode:

(Port1 : Rx, Port2 : Ant, Port3 : Tx)



GSM1800/1900-Rx Mode:

(Port1 : Rx, Port2 : Ant, Port3 : Tx)



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

2009 Johanson Technology, Inc. All Rights Reserved