



*Total Solution Provider in Saw Device*

---

# SA847BM1

LTE, Balanced RF SAW Filter  
Revision 0: September 2010



- Electrical Characteristics
  - Package Dimensions
  - Testing Environment
  - Frequency Characteristics
- 

**SAWNICS Inc.**

---

460 Cheonheung-ri, Seonggeo-eup, Cheonan-si, Chungcheongnam-do, 330-836 / Korea.  
Tel: +82 41 550 9372 / Fax: +82 41 550 9399 / [www.sawnics.com](http://www.sawnics.com)

## □ Electrical Characteristics

### Maximum Ratings

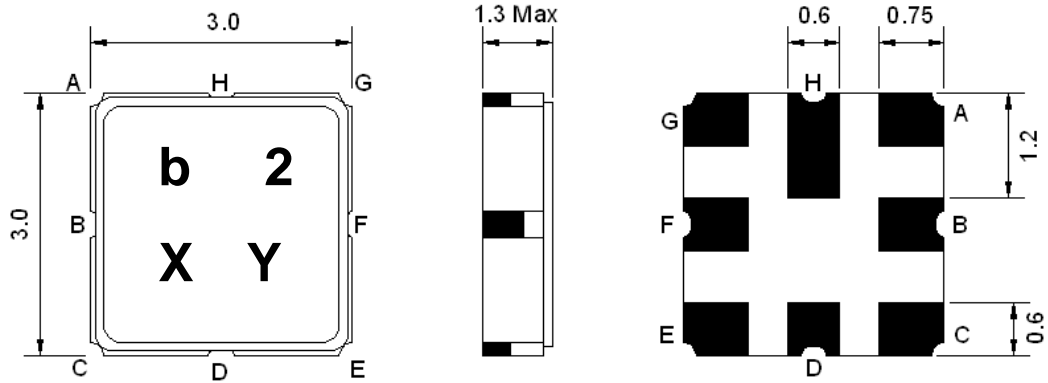
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	-	+80
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	-	-	0
Maximum Input Power	dBm	-	-	10
Source Impedance (Balanced ended) <sup>(1)</sup>	Ω	-	100	-
Load Impedance (Single ended) <sup>(1)</sup>	Ω	-	50	-
Package type & size	M1			
Length x Width	mm <sup>2</sup>	-	3.0 x 3.0	-
Height	mm	-	-	1.3

### Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	847.0	-
Insertion Loss within 832.0 ~ 862.0 MHz	dB	-	3.1	4.5
Amplitude Ripple within 832.0 ~ 862.0 MHz	dB <sub>P-P</sub>	-	1.2	2.2
<b>Attenuation:</b>				
D.C ~ 791.0 MHz	dB	45	55	-
791.0 ~ 821.0 MHz	dB	15	27	-
900.0 ~ 947.0 MHz	dB	30	40	-
VSWR within 832.0 ~ 862.0 MHz	-	-	1.9	2.5

**Notes :** (1) With Matching Network

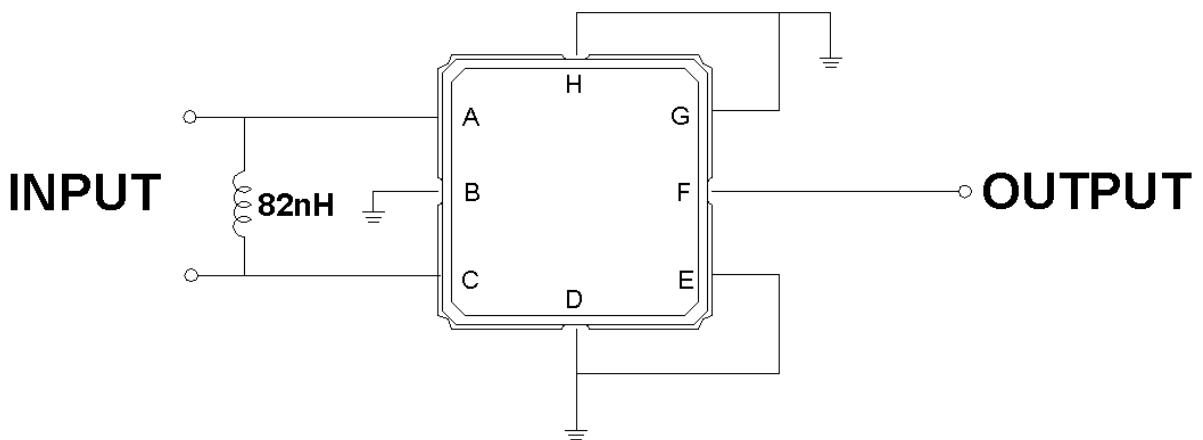
**Package Dimensions**



Marking Descriptions	
b	Wireless Application
2	Series Number
X	Date Code(Year)
Y	Date Code(Month)

Pin Description	
B, D, E, G, H	Ground
A, C	In
F	Out

**Testing Environment**

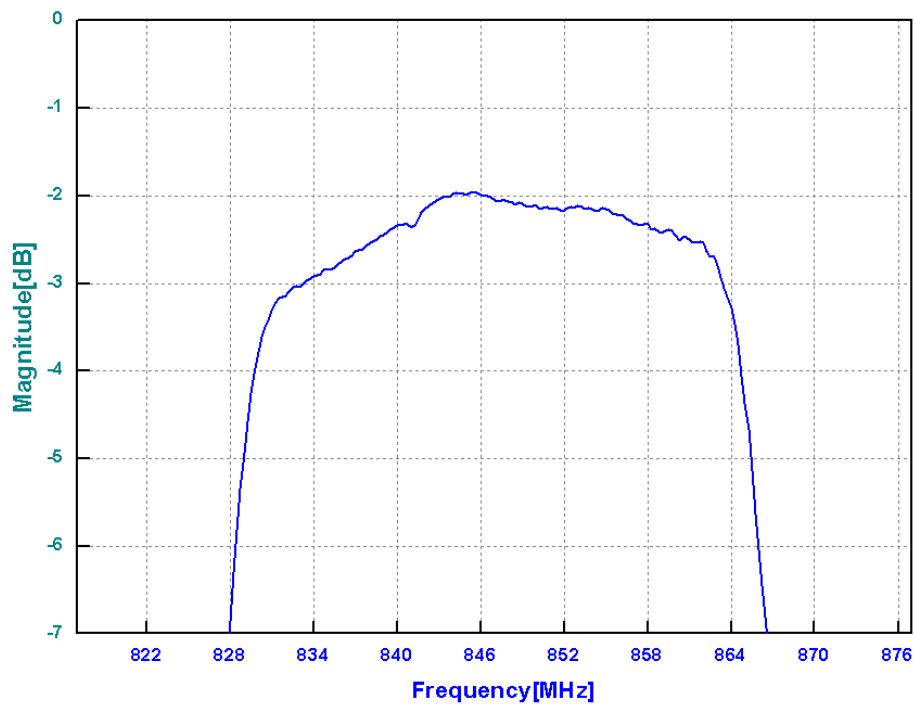
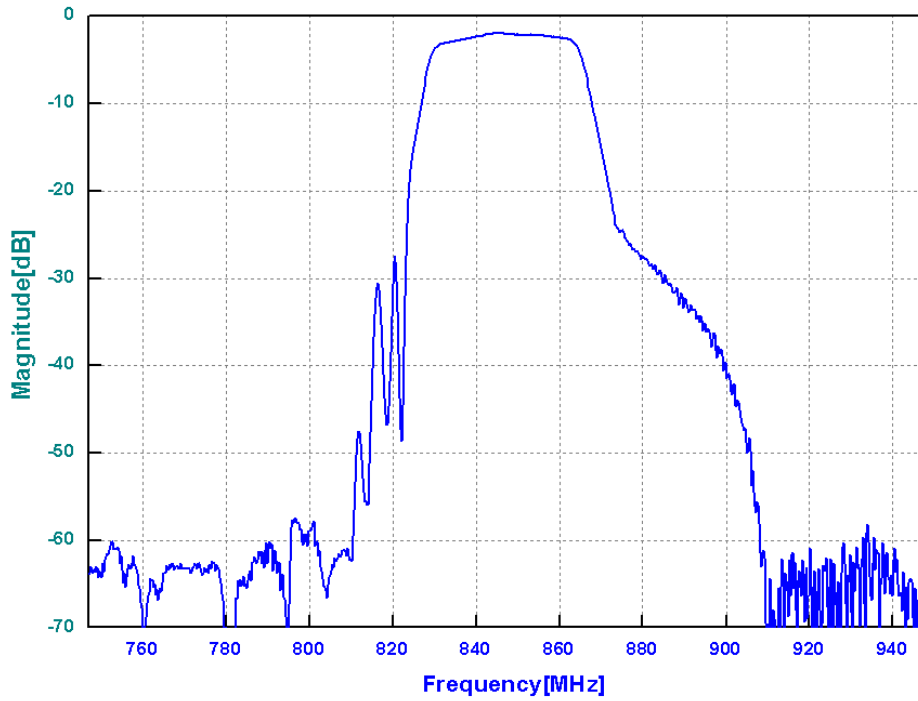


Source Impedance: 100 Ω

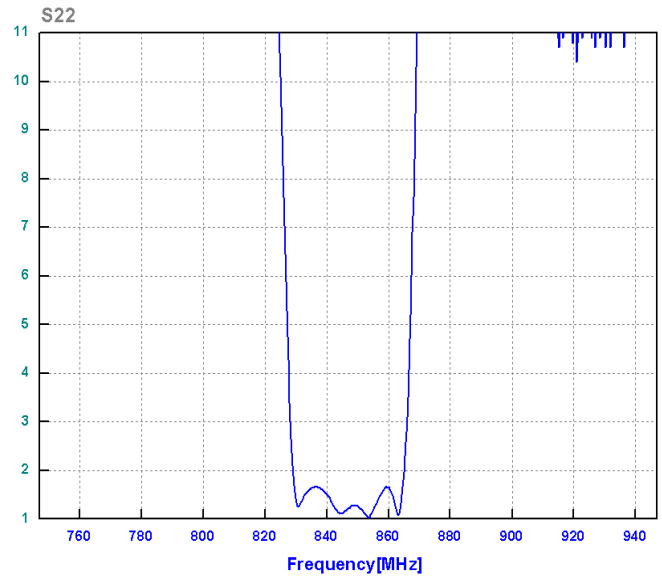
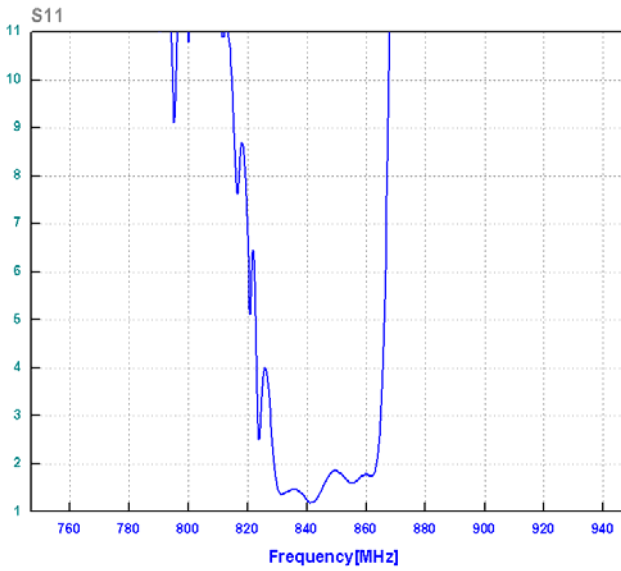
Load Impedance : 50 Ω

## □ Frequency Characteristics

Frequency Response



VSWR



Smith Chart

