Discontinued

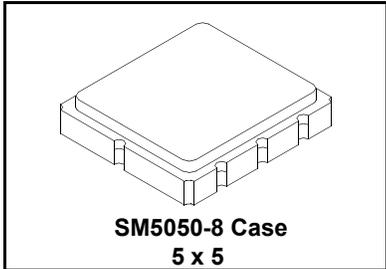**muRata**
INNOVATOR IN ELECTRONICS

RF3336C

868.35 MHz SAW Filter

SM5050-8 Case 5 x 5

- *Ideal Front-End Filter for European Wireless Receivers*
- *Low-Loss, Coupled-Resonator Quartz Design*
- *Simple External Impedance Matching*
- *Complies with Directive 2002/95/EC (RoHS)*

The RF3336C is a low-loss, compact, and economical surface-acoustic-wave (SAW) filter designed to provide front-end selectivity in 868.35 MHz receivers. Receiver designs using this filter include superhet with 10.7 MHz or 500 kHz IF, direct conversion and superregen. Typical applications of these receivers are wireless remote-control and security devices operating in Europe under ETSI I-ETS 300 220, in Germany under FTZ 17 TR 2100, in the United Kingdom under DTI MPT 1340 (for automotive only), in France under PTT Specifications ST/PAA/TPA/AGH/1542, and in Scandinavia.

This coupled-resonator filter (CRF) uses selective null placement to provide suppression, typically greater than 30 dB, of the LO and image spurious responses of superhet receivers with 10.7 MHz IF. Murata's advanced SAW design and fabrication technology is utilized to achieve high performance and very low loss with simple external impedance matching.

Characteristic		Sym	Notes	Minimum	Typical	Maximum	Units
Center Frequency @ 25°C	Absolute Frequency	f_C	1, 2		868.35		MHz
	Tolerance from 868.35 MHz	Δf_C				±125	kHz
Insertion Loss		IL	1		2.6	4.0	dB
3 dB Bandwidth		BW_3	1, 2	500	700	800	kHz
Rejection	at f_c - 21.4 MHz (Image)		1	30	40		dB
	at f_c - 10.7 MHz (LO)			15	30		
	Ultimate				80		
Temperature	Operating Case Temp.	T_C	3, 4	-40		+85	°C
	Turnover Temperature	T_O		15	25	40	°C
	Turnover Frequency	f_O			f_c		MHz
	Freq. Temp. Coefficient	FTC			0.032		ppm/°C^2
Frequency Aging	Absolute Value during the First Year	$|fA|$	5		<±10		ppm/yr
External Impedance	Input Series Inductance	L_1	1		3.3		nH
	Input Shunt Inductance	L_2			15		nH
	Output Series Inductance	L_3			10		nH
	Output Shunt Inductance	C_1			5.1		pF
Standard Reel Quantity	Reel Size 7 inch			500 Pieces/Reel			
	Reel Size 13 inch			3000 Pieces/Reel			
Lid Symbolization (Y=year, WW=week, S=shift)				673//YWWS			

**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

NOTES:

1. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture which is connected to a 50 Ω test system with VSWR $\leq$ 1.2:1. The test fixture L and C are adjusted for minimum insertion loss at the filter center frequency, f_c. Note that insertion loss and bandwidth and passband shape are dependent on the impedance matching component values and quality.
2. The frequency f_c is defined as the midpoint between the 3dB frequencies.
3. Where noted specifications apply over the entire specified operating temperature range.
4. The turnover temperature, T_O, is the temperature of maximum (or turnover) frequency, f_o. The nominal frequency at any case temperature, T_c, may be calculated from: $f = f_o [1 - FTC (T_o - T_c)^2]$.
5. Frequency aging is the change in fc with time and is specified at +65°C or less. Aging may exceed the specification for prolonged temperatures above +65°C. Typically, aging is greatest the first year after manufacture, decreasing significantly in subsequent years.
6. The design, manufacturing process, and specifications of this device are subject to change without notice.
7. One or more of the following U.S. Patents apply: 4,54,488, 4,616,197, and others pending.
8. All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.
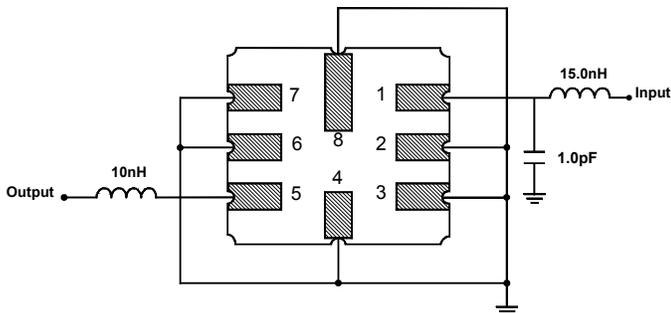
Rating		Value	Units
Input Power Level		10	dBm
DC Voltage		12	VDC
Storage Temperature		-40 to +85	°C
Soldering Temperature	(10 seconds / 5 cycles max.)	260	°C

Electrical Connections

Pin	Connection
1	Input
2	Ground
3	Output Return
4	Case Ground
5	Output
6	Ground
7	Input Return
8	Case Ground
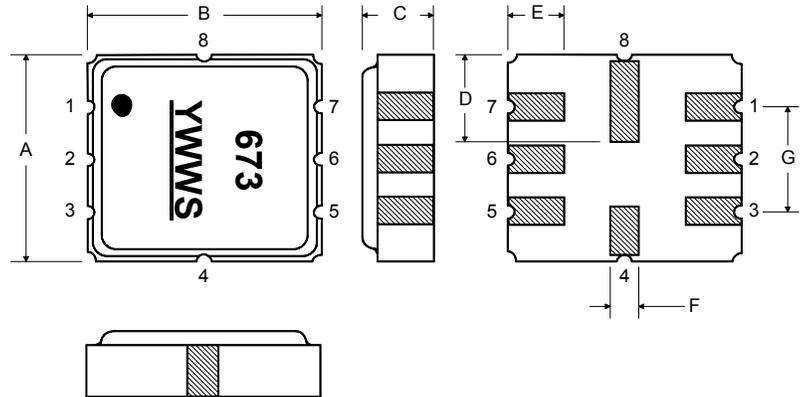
Matching Circuit to 50Ω

Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	4.8	5.0	5.2	0.189	0.197	0.205
B	4.8	5.0	5.2	0.189	0.197	0.205
C			1.7			0.067
D		2.08			0.082	
E		1.17			0.046	
F		0.64			0.025	
G	2.39	2.54	2.69	0.094	0.100	0.106

8 Nov 2002 14:28:52

CH1   S21   LOG   10 dB/   REF 0 dB   3 : -36 . 140   dB   -21 . 400   000   MHz

hp

CH1   Markers
Δ REF=1

1 : 0 . 0000   dB
     0 . 00000   Hz

2 : -33 . 688   dB
   -10 . 7000   MHz

PRm

Cor

3

2
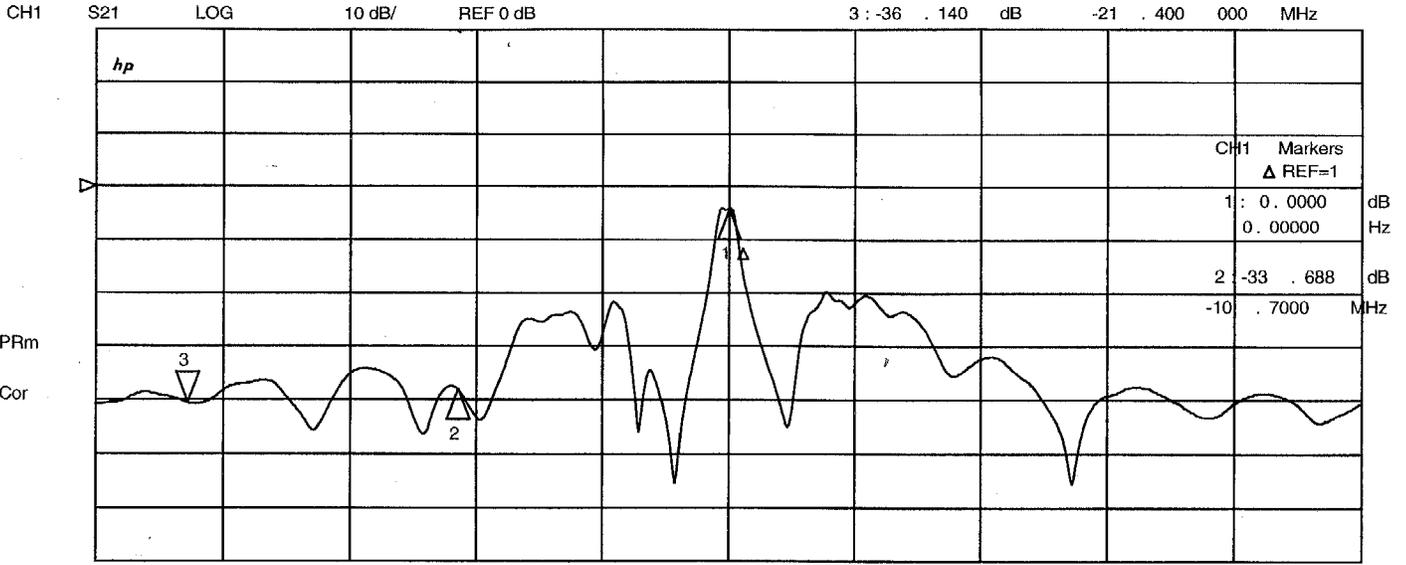
CH1   CENTER   868 . 350   000   MHz   SPAN   50 . 000   000   MHz

CH2   S21   LOG   1 dB/   REF -3 dB   1 : 0 . 0000   dB   0 . 000   000   MHz

1 Δ

2

CH2   Markers
Max   Δ REF=1

BW :   . 726196   MHz

cent   : 868 . 291575   MHz

Q : 1195   7

1_ loss : -3 . 9347   dB

3

4

PRm

Cor

Hld
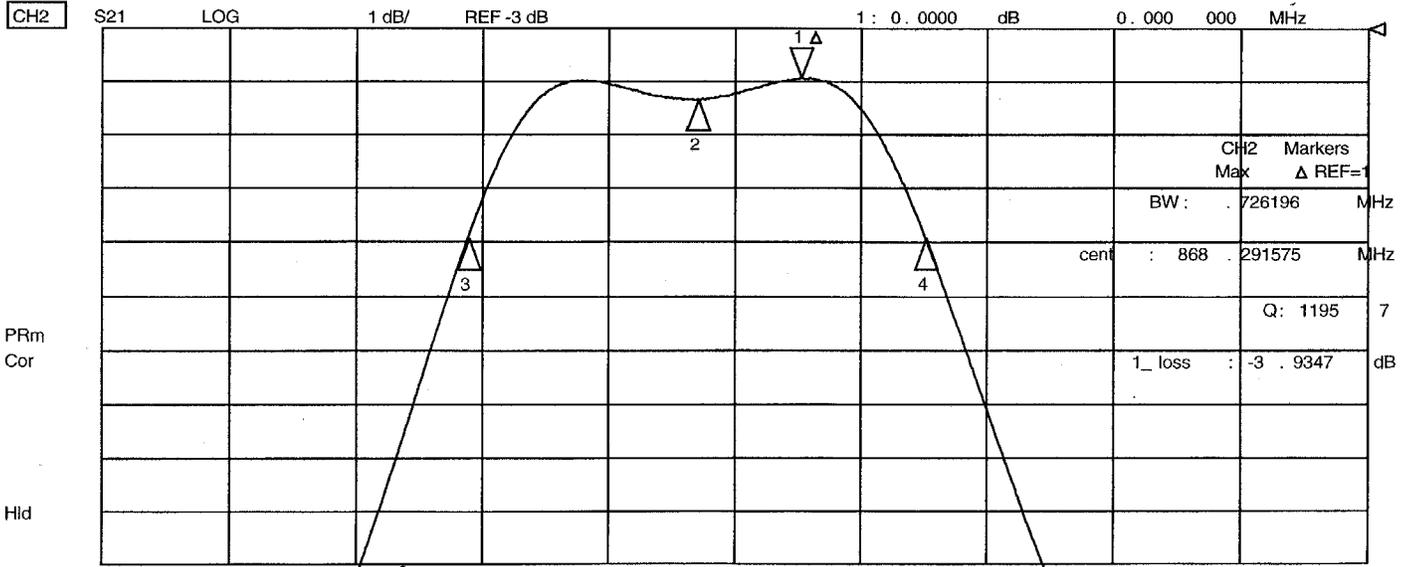
CH2   CENTER   868 . 350   000   MHz   SPAN   2 . 000   000   MHz

www.murata.com

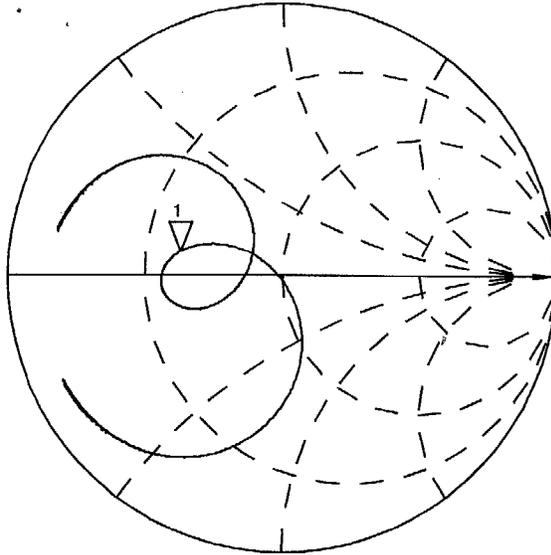CH1   S11   1 U FS   1 : 22 . 673   Ω   4 . 6221   Ω   847 . 15   pH   868 . 350   000   MHz

hp

PRm

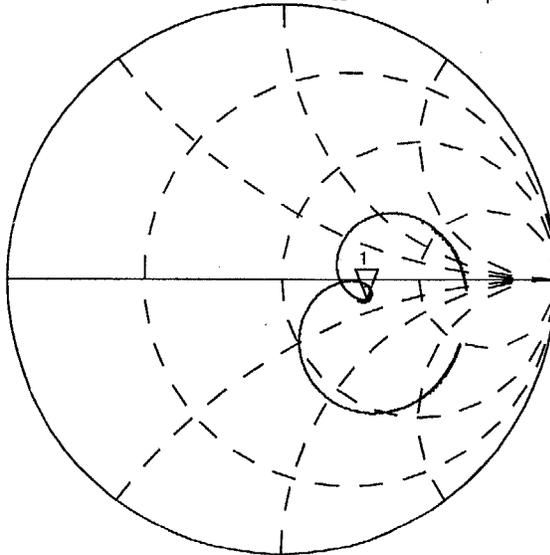Cor

Hld

CH2   S22   1 U FS   1 : 93 . 020   Ω   -15 . 398   Ω   11 . 903   pF   868 . 350   000   MHz

PRm
Cor

Hld

CENTER   868 . 350   000   MHz   SPAN   2 . 000   000   MHz

RF3336C (R) 7/27/17   **www.murata.com**

ООО "ЛайфЭлектроникс"　　　　　　　　　　　　　　　　　**"LifeElectronics" LLC**

ИНН 7805602321 КПП 780501001 Р/С 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 30101810900000000703 БИК 044030703

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.

- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.

- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.