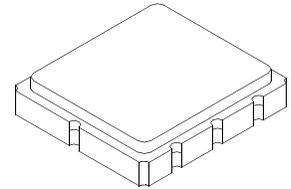


RF1411D

**869.2625 MHz
 SAW Filter**



**SM3838-8 Case
 3.8 x 3.8**

- **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)**
- **Tape and Reel Standard per ANSI/EIA-481**
- **Moisture Sensitivity Level: 1**
- **AEC-Q200 Qualified**

The RF1411D is a low-loss, compact, and economical surface-acoustic-wave (SAW) filter designed to provide front-end selectivity in 869.2625 MHz receivers. Receiver designs using this filter include superhet 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 40 dB, of the LO and image spurious responses of superhet receivers with 10.7 MHz IF. RFMi's advanced SAW design and fabrication technology is utilized to achieve high performance and very low loss with simple external impedance matching (not included).

Characteristic	Sym	Notes	Minimum	Typical	Maximum	Units
Center Frequency @ 25°C	f_C			869.2625		MHz
I.L.				3.3	4.5	dB
PassBand (relative to IL_{min})		868.9125 -869.6125		0.4	1.0	dB
Pass Bandwidth (relative to IL_{min})	BW_3			1250		kHz
Rejection (relative to IL_{min})			10-700 MHz	50	55	dB
			700-842 MHz	35	40	
			842-864 MHz	25	28	
			864-866 MHz	15	24	
			872-879 MHz	8	13	
			879-909 MHz	15	20	
			909-1000 MHz	40	45	
Temperature Coeff				0.032		ppm/ °C ²
Operating Temperature Range			-45		+85	°C
Impedance @ f_C	Input $Z_{IN} = R_{IN} \parallel C_{IN}$	Z_{IN}		117Ω 3.7pf		
	Output $Z_{OUT} = R_{OUT} \parallel C_{OUT}$	Z_{OUT}		117Ω 3.7pf		
Lid Symbolization (in addition to Lot and/or Date Codes)	512 , YWWS					
Standard Reel Quantity	7 Inch Reel			500 Pieces/Reel		
	13 Inch Reel			3000 Pieces/Reel		

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

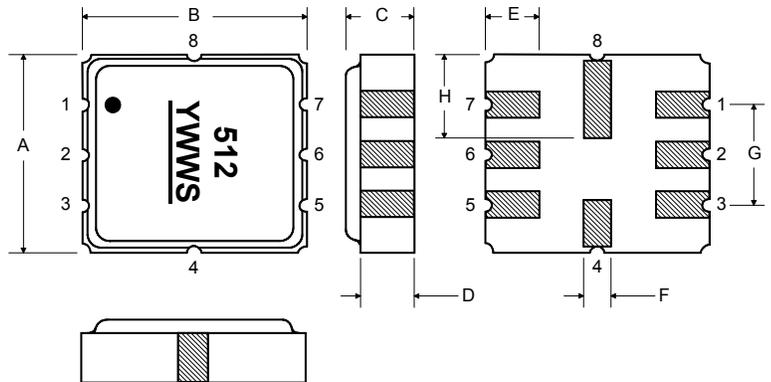
NOTES:

1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

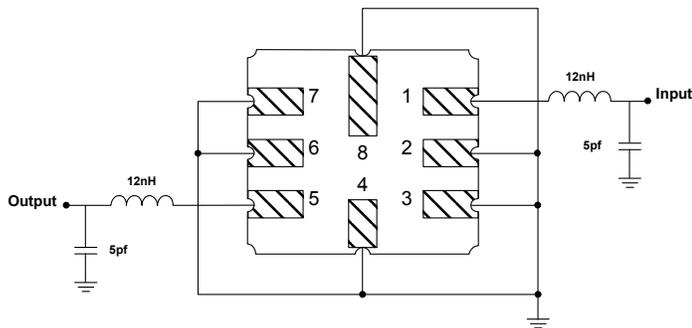
Rating	Value	Units
Input Power Level	+10	dBm
DC Voltage	12	VDC
Storage Temperature	-45 to +85	°C
Soldering Temperature	(10 seconds / 5 cycles max.)	°C

Electrical Connections

Pin	Connection
1	Input
2	Input Ground
3	Ground
4	Case Ground
5	Output
6	Output Ground
7	Ground
8	Case Ground



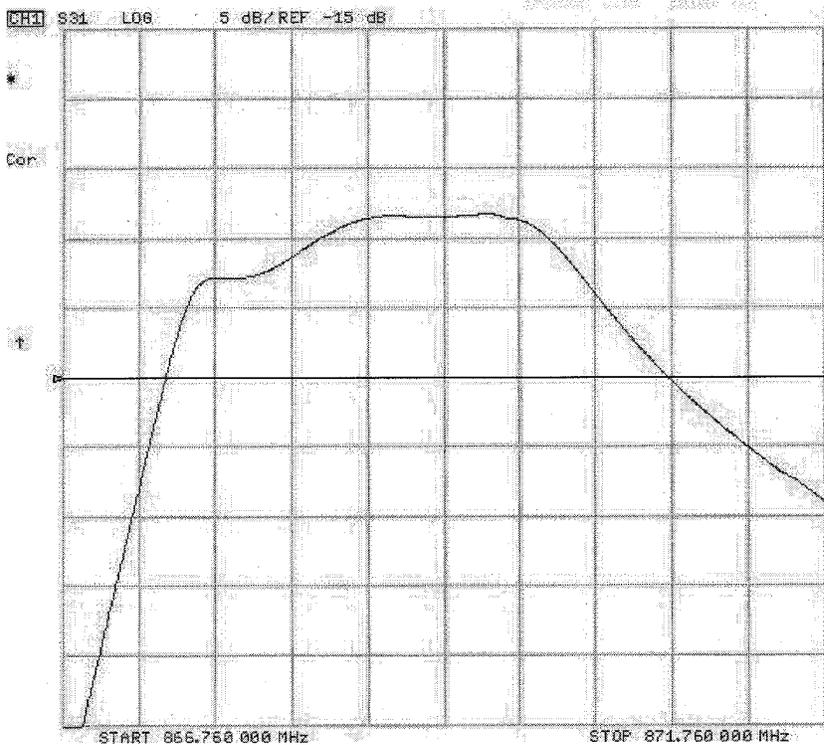
Matching Circuit to 50Ω



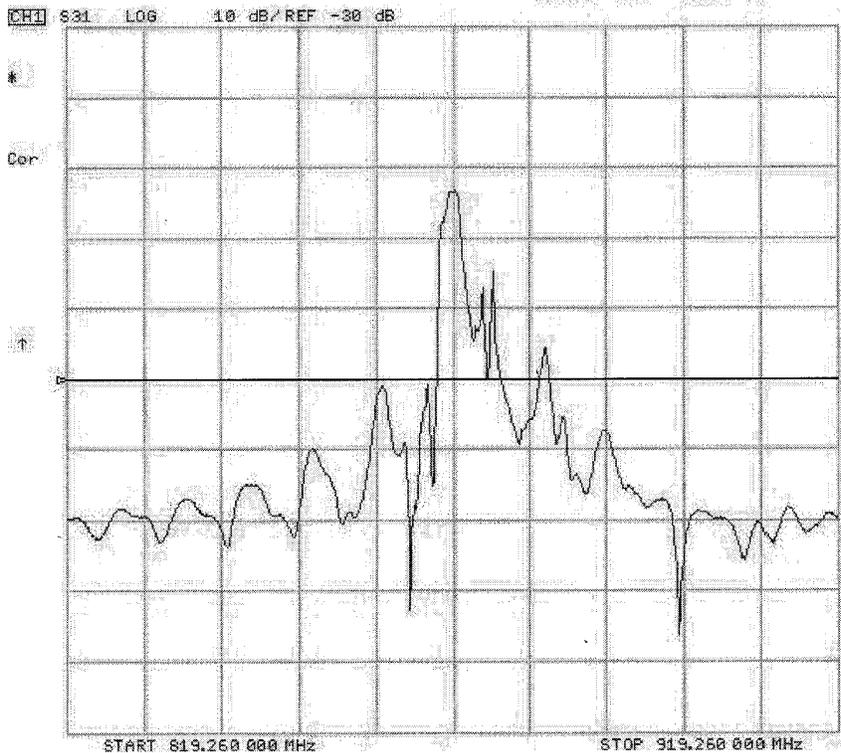
Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.6	3.8	4.0	0.14	0.15	0.16
B	3.6	3.8	4.0	0.14	0.15	0.16
C	1.00	1.20	1.40	0.04	0.05	0.055
D	0.95	1.10	1.25	0.033	0.043	0.05
E	0.90	1.0	1.10	0.035	0.04	0.043
F	0.50	0.6	0.70	0.020	0.024	0.028
G	2.39	2.54	2.69	0.090	0.100	0.110
H	1.40	1.75	2.05	0.055	0.069	0.080

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Recommended Reflow Profile

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C +0/-5°C peak (10 seconds).
4. Time: 5 times maximum.

