

# Discontinued

RFM products are now  
Murata products.

**RF3391D**

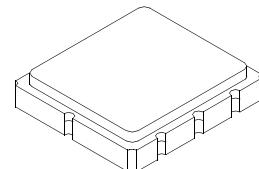
- **Ideal Front-End Filter for European Wireless Receivers**
- **Low-Loss, Coupled-Resonator Quartz Design**
- **Simple External Impedance Matching**
- **Complies with Directive 2002/95/EC (RoHS)<sup>10</sup>**



The RF3391D is a low-loss, compact, and economical surface-acoustic-wave (SAW) filter designed to provide front-end selectivity in 433.42 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.

Characteristic	Value	Units
Input Power Level	+10	dBm
DC Voltage	12	VDC
Storage Temperature Range	-40 to +125	°C
Operating Temperature Range	-40 to +125	°C
Soldering Temperature (10 seconds / 5 cycles maximum)	260	°C

**433.42 MHz  
SAW Filter**



**SM3838-8 Case**  
**3.8 x 3.8**

## Electrical Characteristics

Characteristic	Sym	Notes	Minimum	Typical	Maximum	Units
Center Frequency at 25°C	f <sub>c</sub>	1, 2, 3		433.42		MHz
Insertion Loss	IL <sub>MIN</sub>	1, 3		2.8	3.5	dB
Passband Ripple (Relative to IL <sub>MIN</sub> ) f <sub>c</sub> ±200 kHz		1, 3		1.2	1.8	dB
3 dB Bandwidth	BW <sub>3</sub>	1, 3	500	600	800	kHz
Rejection relative to IL <sub>MIN</sub>	10 - 415 MHz 415 - 425 MHz 425 - 431 MHz 435 - 440 MHz 445 - 450 MHz 450 - 1000 MHz	1, 3	40 30 20 10 30 40	43 33 23 13 33 43		dB
Temperature Freq. Temp. Coefficient	FTC			0.032		ppm/°C <sup>2</sup>
Frequency Aging	Absolute Value during the First Year	fA	5		≤10	ppm/yr
Impedance @ fc	Input Z <sub>IN</sub> = R <sub>IN</sub>   C <sub>IN</sub> Output Z <sub>OUT</sub> = R <sub>OUT</sub>   C <sub>OUT</sub>	Z <sub>IN</sub> Z <sub>OUT</sub>	1	137.18 Ω    7.58 pF 126.97 Ω    7.87 pF		
Lid Symbolization (Y=year WW=week S=shift)				739 // YWWS		
Standard Reel Quantity	Reel Size 7 Inch Reel Size 13 Inch		9	500 Pieces/Reel 3000 Pieces/Reel		

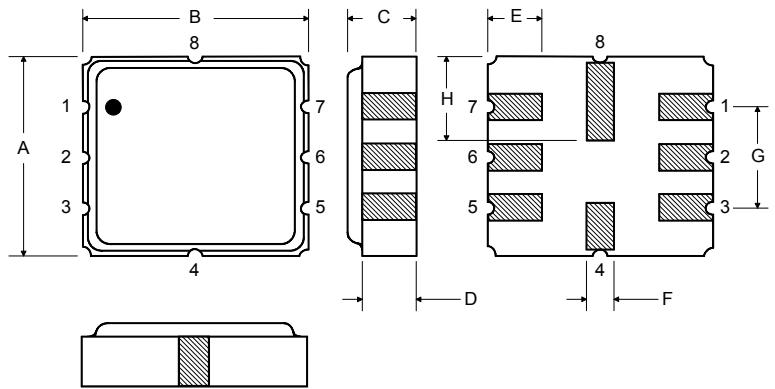
**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

## NOTES:

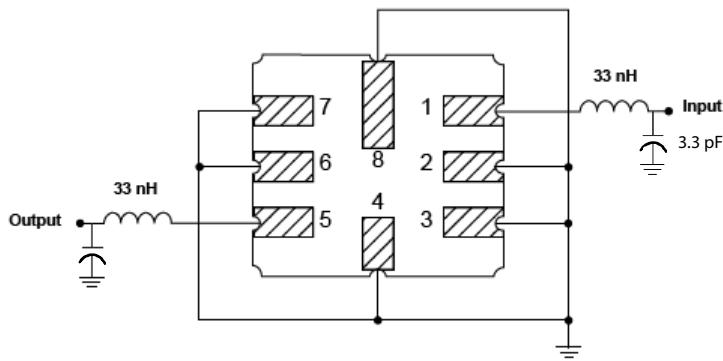
1. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture which is connected to a 50 Ω test system with VSWR ≤ 1.2:1. The test fixture L and C are adjusted for minimum insertion loss at the filter center frequency, f<sub>c</sub>. Note that insertion loss and bandwidth and passband shape are dependent on the impedance matching component values and quality.
2. The frequency f<sub>c</sub> is defined as the midpoint between the 3dB frequencies.
3. Where noted specifications apply over the entire specified operating temperature range of -40°C to +90°C.
4. The turnover temperature, T<sub>O</sub>, is the temperature of maximum (or turnover) frequency, f<sub>O</sub>. The nominal frequency at any case temperature, T<sub>C</sub>, may be calculated from: f = f<sub>O</sub> [1 - FTC (T<sub>O</sub> - T<sub>C</sub>)<sup>2</sup>].
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.
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.
9. Tape and Reel Standard Per ANSI / EIA 481.
10. This product complies with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

**PRIMARY  
Electrical Connections**

Pin	Connection
1	Input Ground
2	Input
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
<b>A</b>	3.6	3.8	4.0	0.14	0.15	0.16
<b>B</b>	3.6	3.8	4.0	0.14	0.15	0.16
<b>C</b>	1.00	1.20	1.40	0.04	0.05	0.055
<b>D</b>	0.95	1.10	1.25	0.033	0.043	0.05
<b>E</b>	0.90	1.0	1.10	0.035	0.04	0.043
<b>F</b>	0.50	0.6	0.70	0.020	0.024	0.028
<b>G</b>	2.39	2.54	2.69	0.090	0.100	0.110
<b>H</b>	1.40	1.75	2.05	0.055	0.069	0.080



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

#### Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помошь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помошь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: [org@eplast1.ru](mailto:org@eplast1.ru)

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.