



AEC-Q200

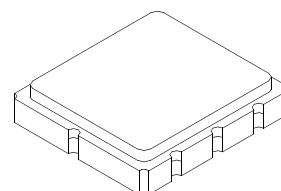
This component was always RoHS compliant from the first date of manufacture.

- **Medical Band (402-405 MHz) Front-End Filter**
- **Low-Loss, Coupled-Resonator (Lithium Tantalate) LiTaO₃ Design**
- **Complies with Directive 2002/95/EC (RoHS)**
- **Tape and Reel Standard per ANSI/EIA-481**



RF1419D

**403.5 MHz
SAW Filter**



**SM3838-8 Case
3.8 x 3.8**

The RF1419D is a surface-acoustic-wave (SAW) filter designed to provide front-end selectivity in the 402-405 MHz band. This filter is ideal for short range wireless medical data applications where small size and low power consumption are required features. Receiver designs using this filter include superhet, direct conversion or superregen. RFMi's advanced SAW design and fabrication technology is utilized to achieve high performance and optimum loss with simple external impedance matching.

Characteristic		Sym	Notes	Minimum	Typical	Maximum	Units
Center Frequency at 25°C Absolute Frequency		f _c			403.5		MHz
Insertion Loss		IL _{MIN}			1.60	2.5	dB
Passband Ripple (Relative to ILMIN) 402-405 MHz					1.10	1.25	dB
3 dB Bandwidth		BW ₃		3.0	7.5		MHz
Rejection Attenuation: (relative to ILmin)		358.5 MHz		40	65		dB
		358.5 - 384 MHz		35	50		
		415 - 423 MHz		25	35		
		423 - 503 MHz		40	50		
Temperature	Freq. Temp. Coefficient	FTC			-37		ppm/k
Frequency Aging	Absolute Value during the First Year	fA			≤10		ppm/yr
Impedance Match Input/Output				50 Ohms			
Lid Symbolization (Y=year WW=week S=shift)		560, YWWS					
Standard Reel Quantity		Reel Size 7 Inch			500 Pieces/Reel		
		Reel Size 13 Inch			3000 Pieces/Reel		



CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

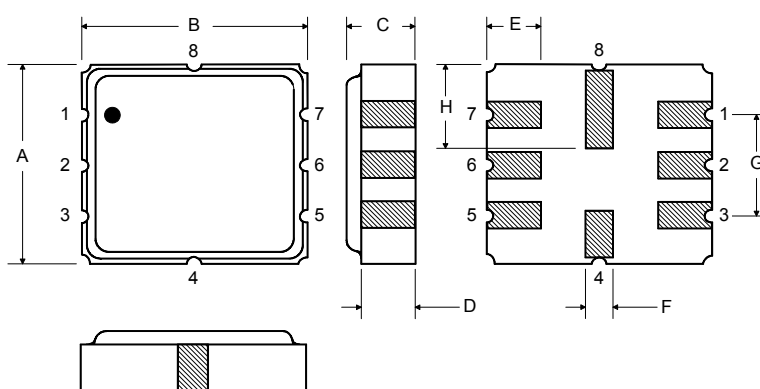
NOTES:

1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.

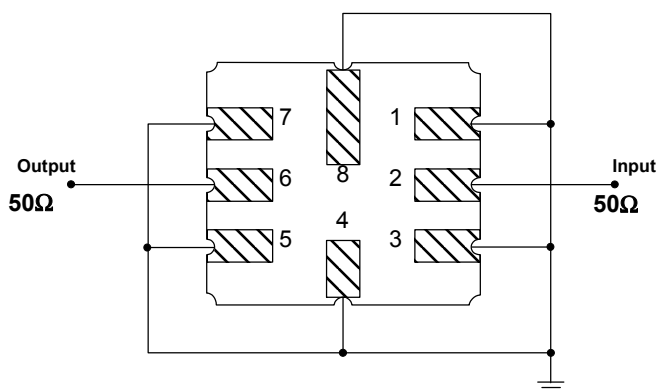
Rating	Value	Units
Input Power Level	10	dBm
DC Voltage	3	VDC
Storage Temperature	-40 to +85	°C
Soldering Temperature	(10 seconds / 5 cycles max.)	260 °C

Electrical Connections

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

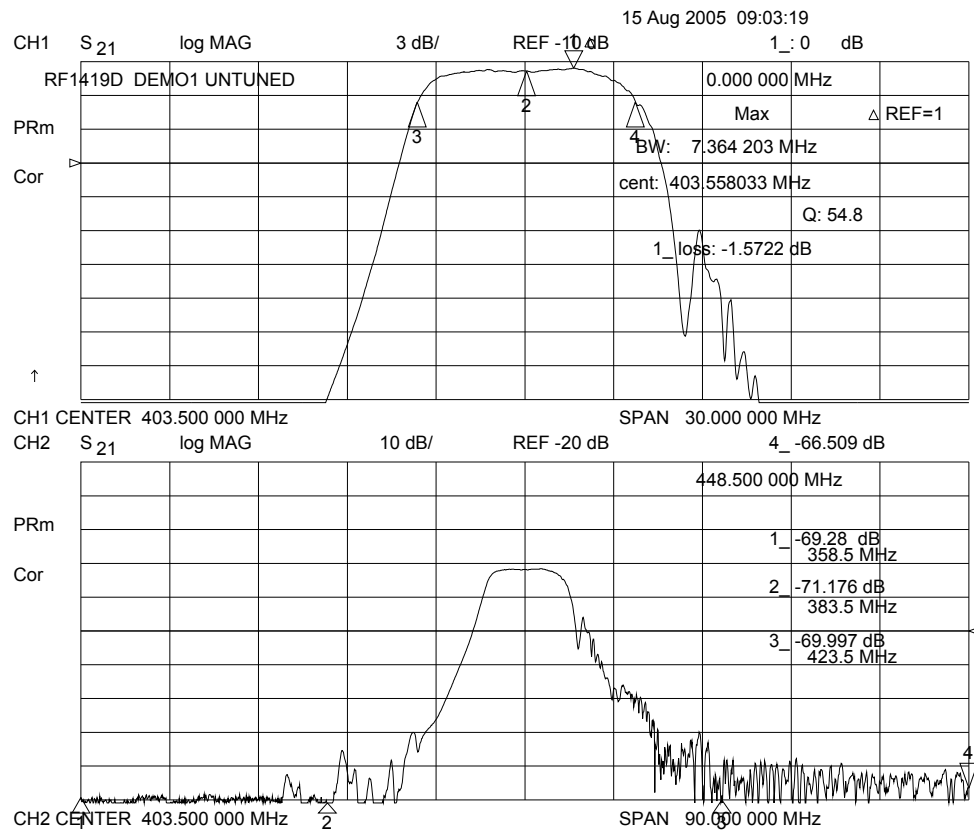


Matching Circuit to 50Ω



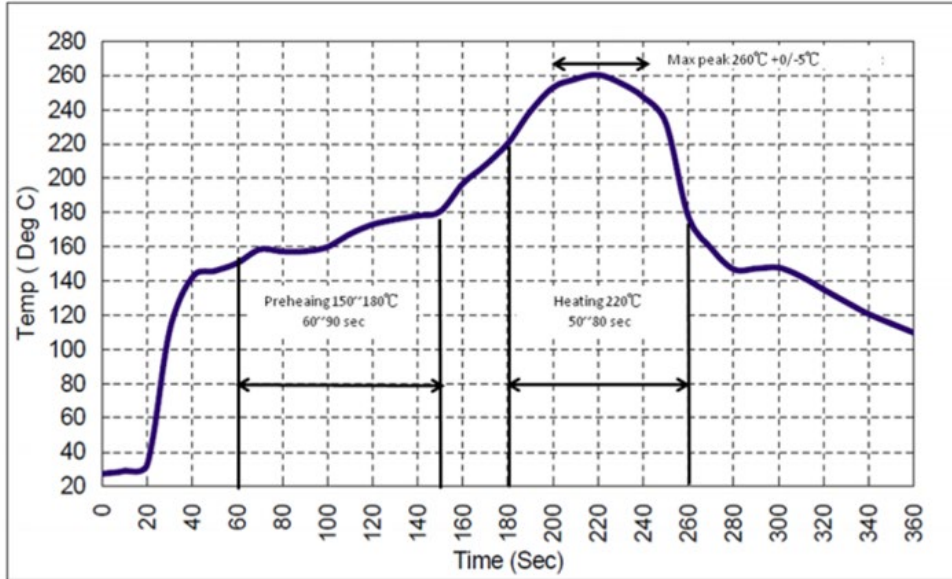
Case Dimensions

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



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.



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