



AEC-Q200

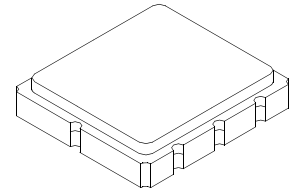
This component was always RoHS compliant from the first date of manufacture.

- 402 to 405 MHz Medical Band Front-end Filter
- Single-ended Input/Output Operation
- Complies with Directive 2002/95/EC (RoHS)
- Tape and Reel Standard per ANSI/EIA-481



RF3619D

**404.0 MHz
SAW Filter**



**SM3838-8 Case
3.8 x 3.8**

Absolute Maximum Ratings

Rating	Value	Units
Input Power Level	+10	dBm
DC Voltage on any Non-ground Pin	3	V
Operating Temperature Range	-10 to +60	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Solder Reflow Temperature, 10 seconds, 5 cycles maximum	260	°C

Characteristic	Sym	Notes	Minimum	Typical	Maximum	Units
Center Frequency at 25 °C	f_c			404.0		MHz
Insertion Loss	IL_{MIN}			2.1	2.3	dB
Passband Ripple, 402-405 MHz				0.6	0.8	dB
3 dB Bandwidth	BW_3		5.0	6.0		MHz
Attenuation relative to IL_{MIN} :						dB
398.5 MHz			30	35		
408.5 MHz			25	45		
383.5 MHz			40	50		
423.5 MHz			38	48		
Freq. Temp. Coefficient	FTC			-37		ppm/k
Frequency Aging, First Year	fA			≤10		ppm
Single-ended Input/Output Impedance Match				50		ohms
Differential Input/Output Impedance Match				150		ohms
Lid Symbolization (Y=year WW=week S=shift)	A15, YWWS					
Standard Reel Quantity	Reel Size 7 Inch			500 Pieces/Reel		
	Reel Size 13 Inch			3000 Pieces/Reel		

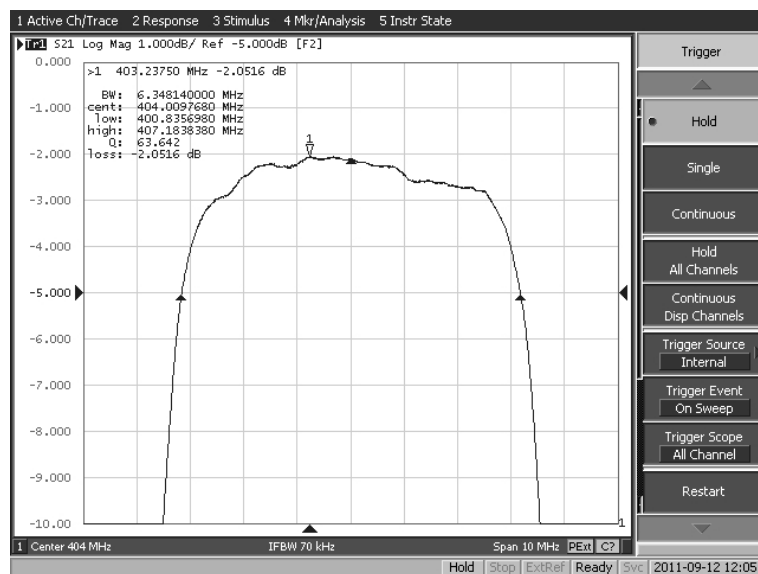
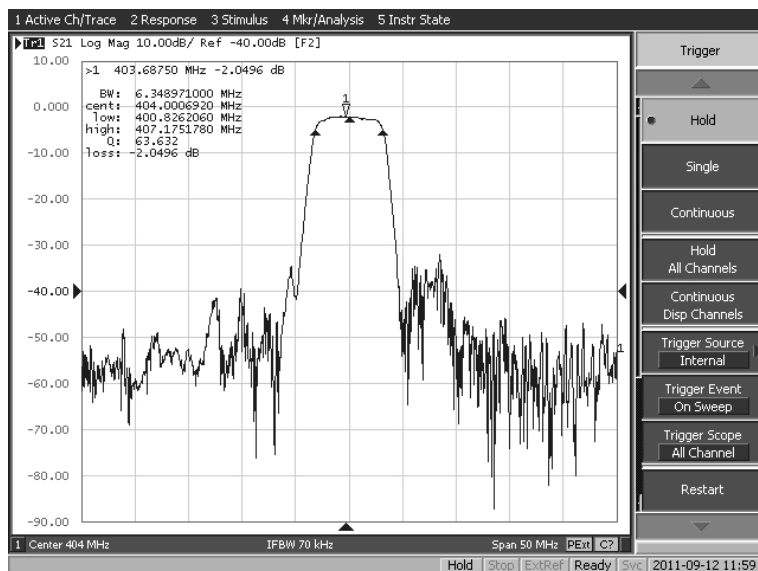
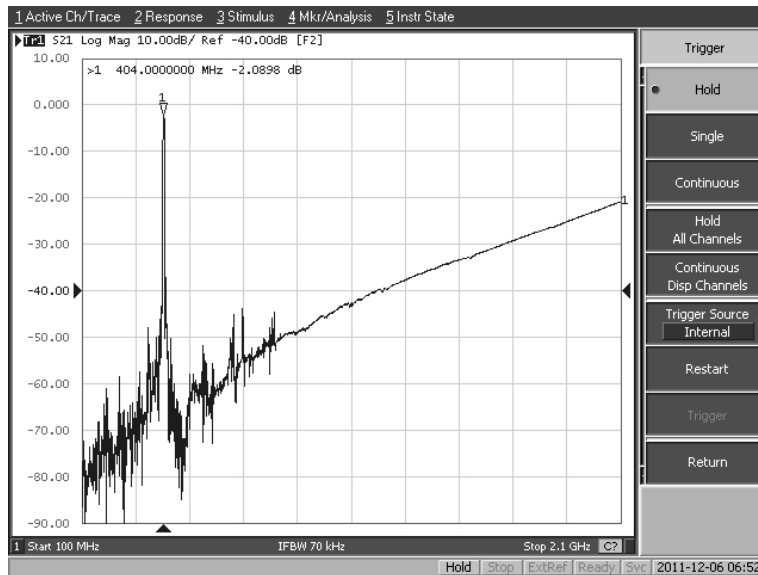


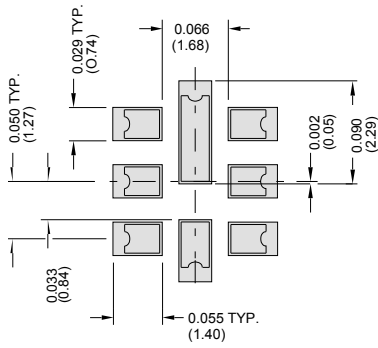
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

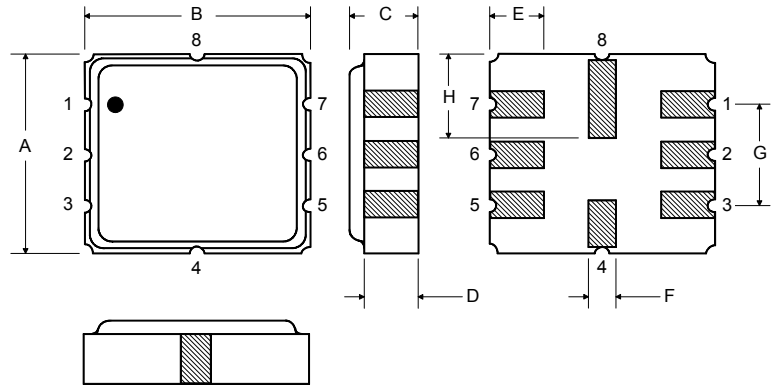
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.

Filter Response Plots





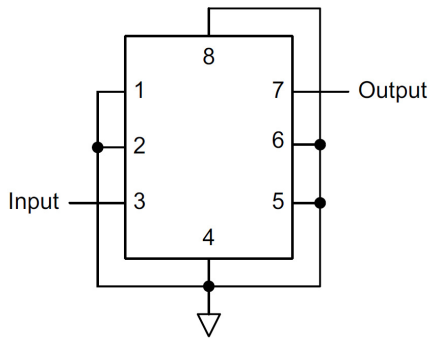
PCB Land Pattern
Filter Primary
Electrical Connections



Case Dimensions

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

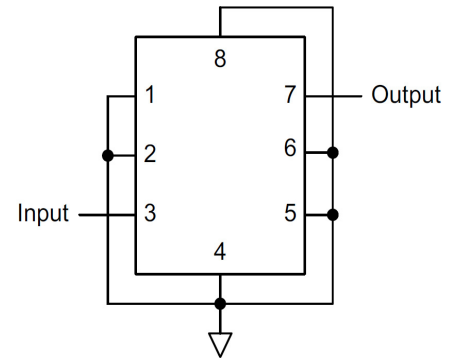
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.6	3.8	4.0	0.14	0.15	0.16
B	3.6	3.8	4.0	0.14	0.15	0.16
C	1.00	1.20	1.40	0.04	0.05	0.055
D	0.95	1.10	1.25	0.033	0.043	0.05
E	0.90	1.0	1.10	0.035	0.04	0.043
F	0.50	0.6	0.70	0.020	0.024	0.028
G	2.39	2.54	2.69	0.090	0.100	0.110
H	1.40	1.75	2.05	0.055	0.069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



Single-ended
Input and Output
Filter Primary
Connection Diagram

Filter Alternate
Electrical Connections

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



Single-ended
Input and Output
Filter Alternate
Connection Diagram

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.

