

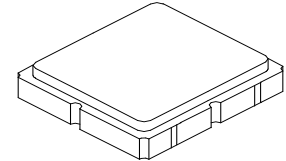


AEC-Q200

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

RF3702D

**426.44 MHz
SAW Filter**



SM3838-8

- *Low Insertion Loss SAW Filter*
- *Balanced 200 ohm Input, Single-ended 50 ohm Output*
- *Complies with Directive 2002/95/EC (RoHS)*



Absolute Maximum Ratings

Rating	Value	Units
Input Power Level	+20	dBm
DC Voltage	±10	V
Operating Temperature Range	-20 to +70	°C
Storage Temperature Range in Tape and Reel	-30 to +85	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			426.44		MHz
3 dB Bandwidth	BW_3		1.0			MHz
Maximum Insertion Loss, 426.22 to 426.66 MHz	IL_{MAX}			2.0	3.0	dB
Amplitude Ripple, 426.22 to 426.66 MHz				0.6	1.0	dB _{P-P}
Rejection Referenced to 0 dB:						
404.64 to 405.44 MHz, [426.44 -(21 to 21.8) MHz]			50	54		dB
405.44 to 421.44 MHz			30	36		
436.44 to 447.84 MHz			20	40		
470.0 to 770.0 MHz			50	59		
800.0 to 2010.0 MHz			40	65		
Balanced Source Impedance	Z_S			200		Ω
Load Impedance	Z_L			50		Ω

Case Style	SM3838-8 3.8 x 3.8 mm Nominal Footprint	
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator	948, <u>YWW</u> S	
Standard Reel Quantity	Reel Size 7 Inch	500 Pieces/Reel
	Reel Size 13 Inch	3000 Pieces/Reel

Electrical Connections

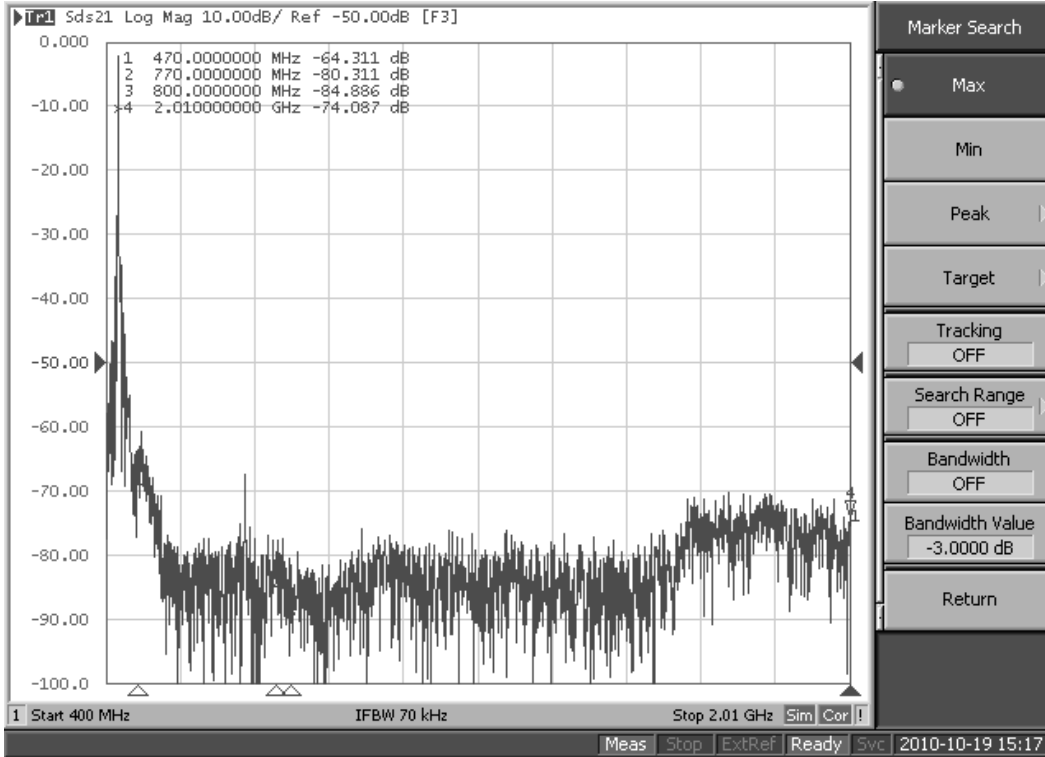
Connection	Terminals
Balanced Input	1,2
Output	5
Case Ground	3, 4, 6, 7, 8

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

NOTES:

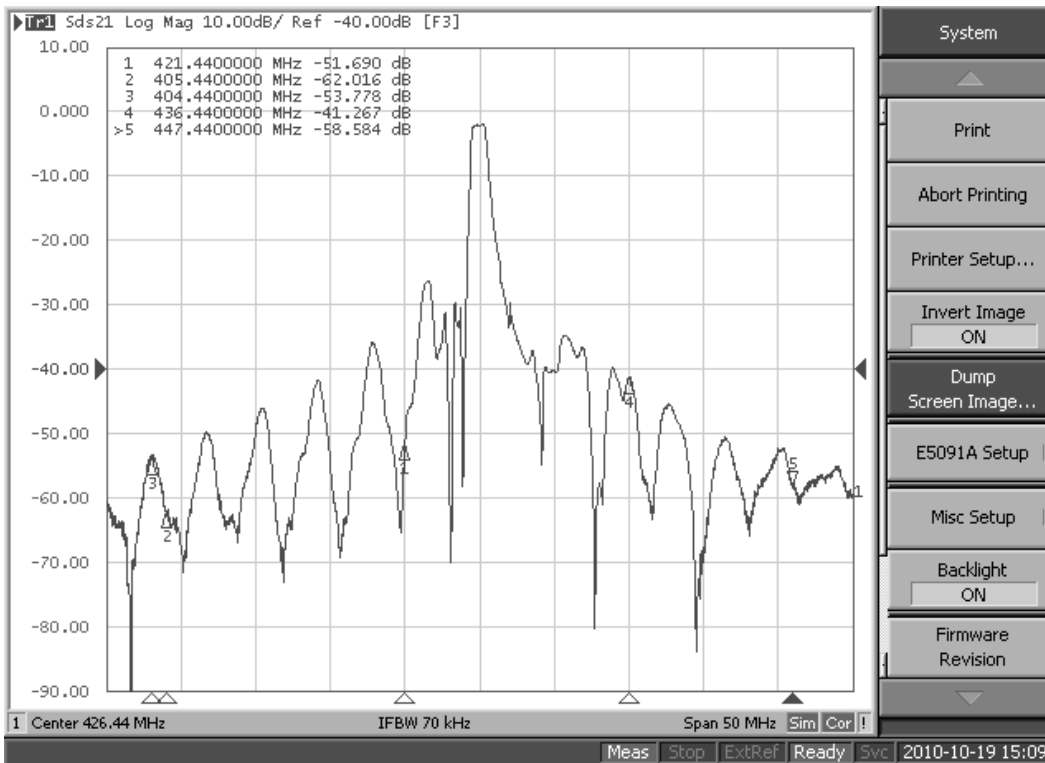
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.

Frequency Response Plots



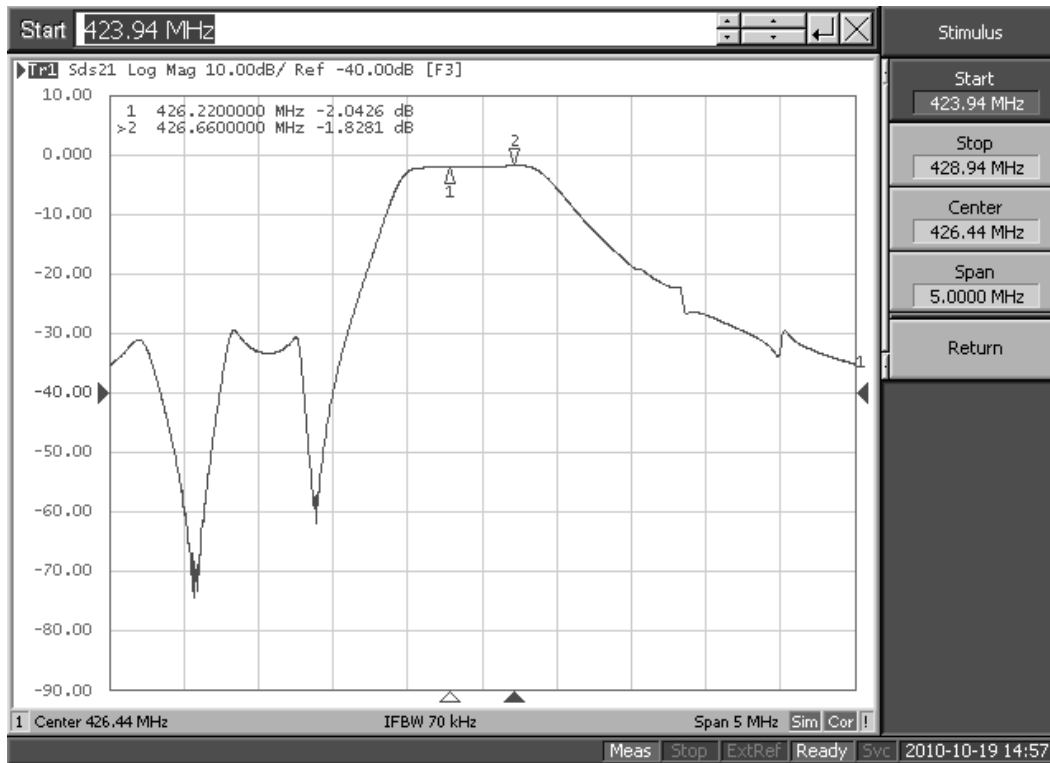
Marker Search

- Max
- Min
- Peak
- Target
- Tracking OFF
- Search Range OFF
- Bandwidth OFF
- Bandwidth Value -3.0000 dB
- Return



System

- Print
- Abort Printing
- Printer Setup...
- Invert Image ON
- Dump Screen Image...
- E5091A Setup
- Misc Setup
- Backlight ON
- Firmware Revision



Stimulus

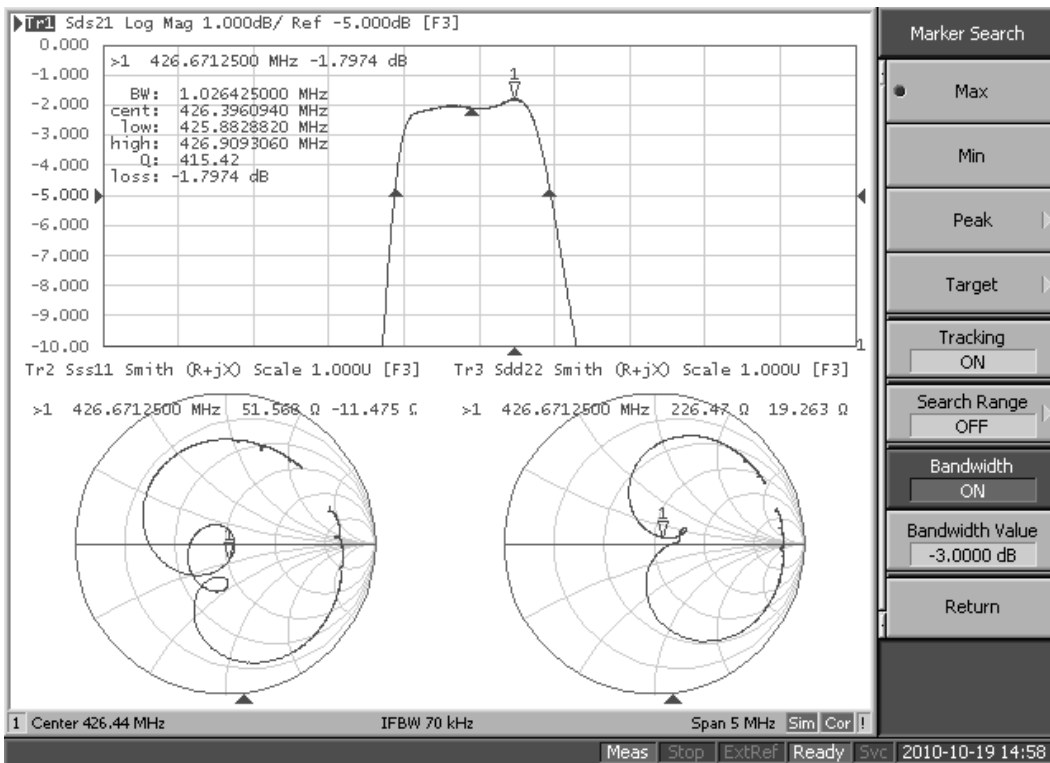
Start
423.94 MHz

Stop
428.94 MHz

Center
426.44 MHz

Span
5.0000 MHz

Return



Marker Search

Max

Min

Peak

Target

Tracking
ON

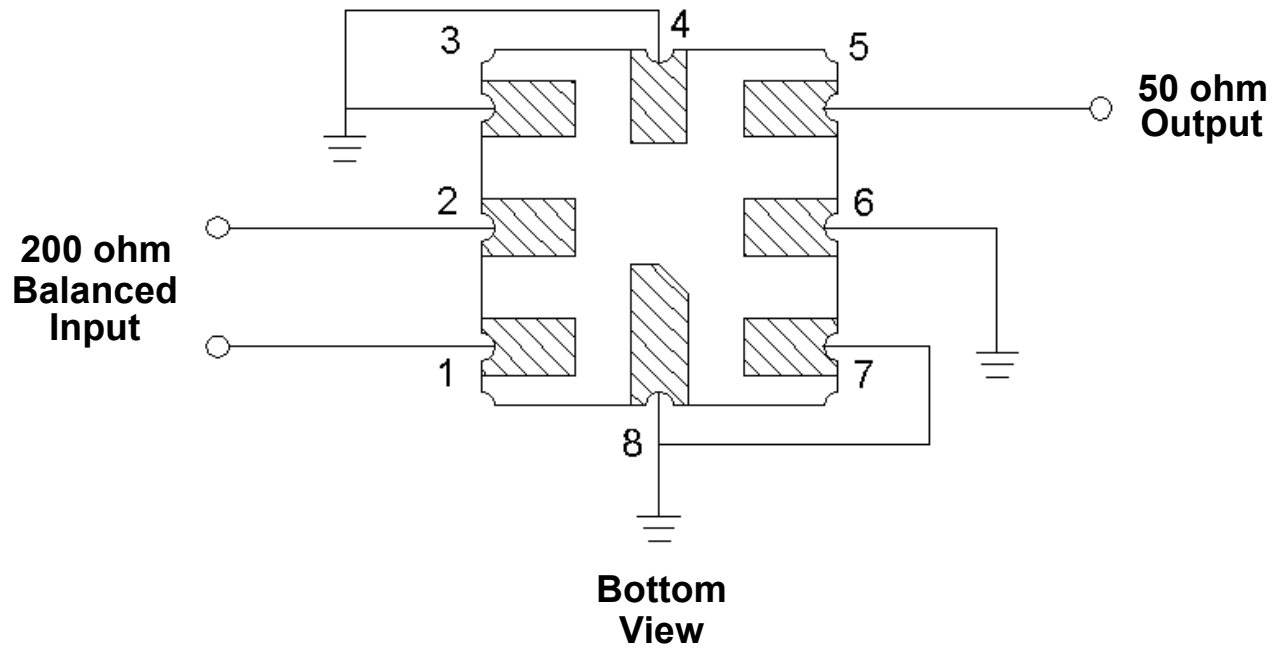
Search Range
OFF

Bandwidth
ON

Bandwidth Value
-3.0000 dB

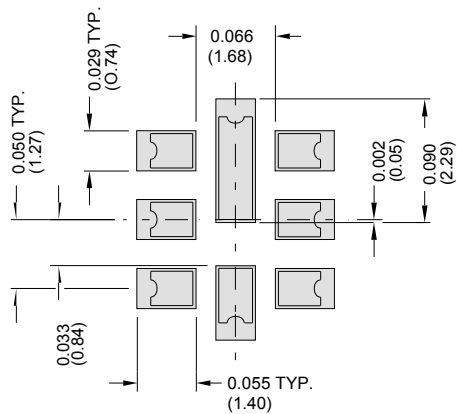
Return

Application Circuit



SM3838-8 Case

8-Terminal Ceramic Surface-Mount Case 3.8 X 3.8 mm Nominal Footprint



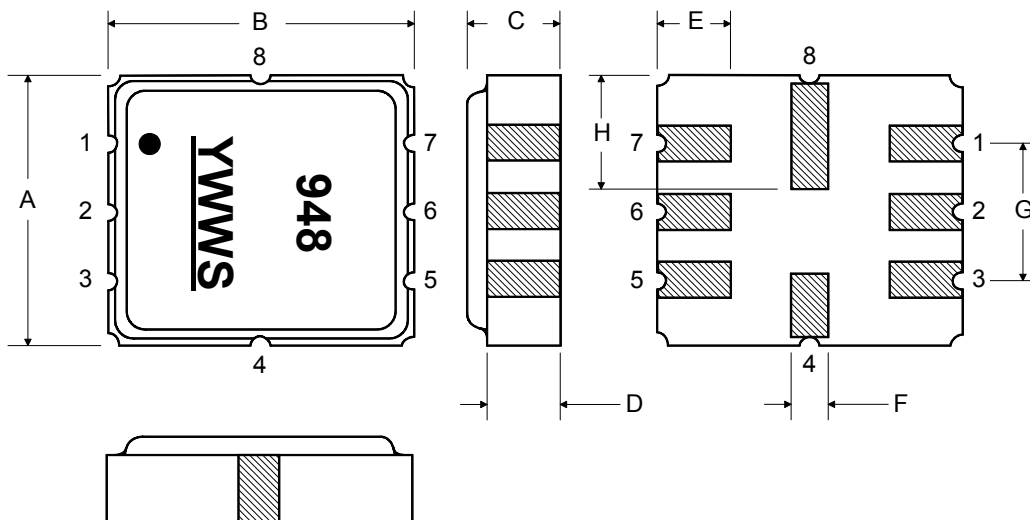
PCB Footprint

Dimension	Case Dimensions					
	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.6	3.8	4.0	0.142	0.150	0.157
B	3.6	3.8	4.0	0.142	0.150	0.157
C	0.90	1.00	1.1	0.035	0.040	0.043
D	0.80	0.90	1.0	0.031	0.035	0.040
E	0.90	1.00	1.10	0.035	0.040	0.043
F	0.50	0.60	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

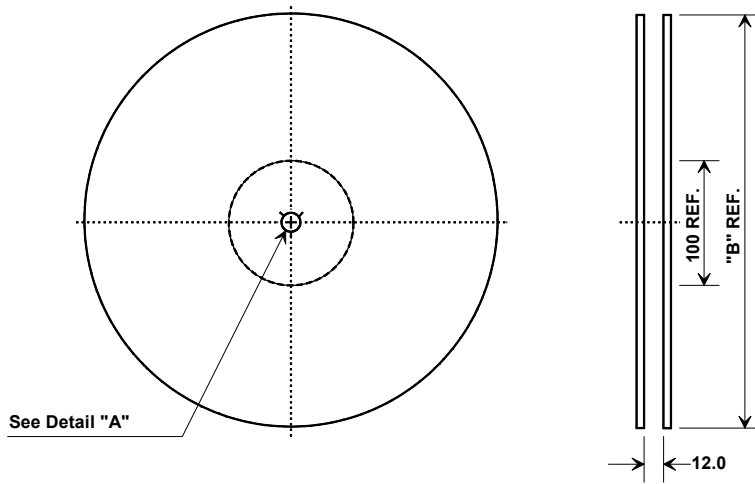
Materials	
Solder Pad Plating	0.3 to 1.0 μ m Gold over 1.27 to 8.89 μ m Nickel
Lid Plating	2.0 to 3.0 μ m Nickel
Body	Al ₂ O ₃ Ceramic
Pb Free	

TOP VIEW

BOTTOM VIEW

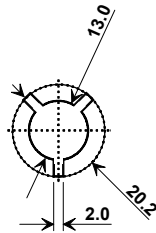


Tape and Reel Specifications



Tape and Reel Standard per ANSI/EIA-481

"B"		Quantity Per Reel
Nominal Size		
Inches	millimeters	
7	178	500
13	330	3000



COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	4.25 mm
Bo	4.25 mm
Ko	1.30 mm
Pitch	8.0 mm
W	12.0 mm

