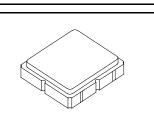
Preliminary



- 440.6 to 457.4 MHz Filter
- Optimized for use with the TRC105 Transceiver
- Balanced 150 ohm IC Interface
- Complies with Directive 2002/95/EC (RoHS) Pb

Absolute Maximum Ratings

Rating	Value	Units
Input Power Level	+15	dBm
DC Voltage	±5	V
Operating Temperature Range	-40 to +85	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C



SM3838-8

Electrical Characteristics

Sym	Notes	Min	Тур	Max	Units	
f _C			449.0		MHz	
BW ₁			18.0		MHz	
IL _{MAX}			1.4	2.4		
				1.0		
		32	35			
		32	35		dB	
		37	40		1	
		55	60			
		62	65			
		59	62			
Z _S			50		Ω	
ZL			150		Ω	
SM3838-8 3.8 x 3.8 mm Nor		3.8 mm Nomina	al Footprint			
892, YWWS						
500 Pieces/Reel						
3000 Pieces/Reel						
	fc BW1 ILMAX	f _C BW1 IL _{MAX} IL Z _S Z _L	$\begin{tabular}{ c c c c c } \hline f_{C} & & & & & & & \\ \hline & & & & & & & & \\ \hline & & & &$	$\begin{tabular}{ c c c c c } \hline f_{C} & & 449.0 \\ \hline BW_{1} & & 18.0 \\ \hline BW_{1} & & 18.0 \\ \hline IL_{MAX} & & 1.4 \\ \hline & & & & & & \\ \hline & & & & & & & \\ \hline & & & &$	$\begin{tabular}{ c c c c c } \hline f_C & & 449.0 & & & & & & & & & & & & & & & & & & &$	

Electrical Connections

Connection	Terminals
Single-ended Port	6
Balanced Port	1, 3
Case Ground	4, 5, 7, 8
No Connection	2



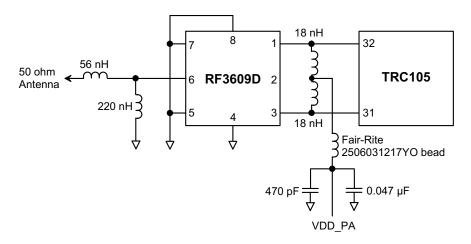
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

- 1. Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50 Ω and measured with 50 Ω network analyzer.
- Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, fc. 2. 3. Rejection is measured as attenuation below the minimum IL point in the passband. Rejection in final user application is dependent on PCB layout and external impedance matching design. See Application Note No. 42 for details. The design, manufacturing process, and specifications of this filter are subject to change.
- 4.
- 5.
- US and international patents may apply. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc. 6.

RF3609D

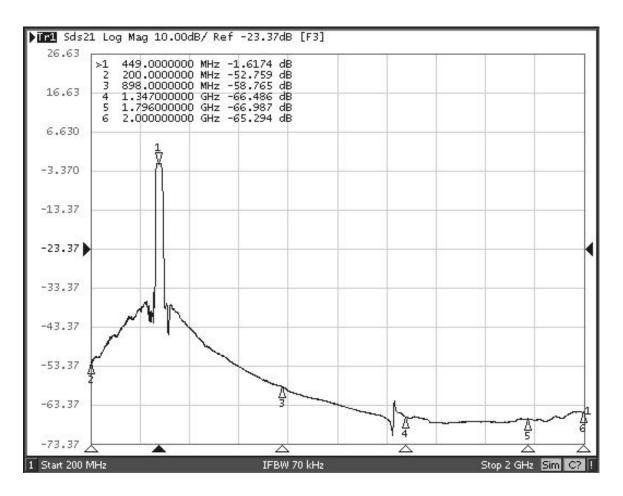
449.0 MHz

SAW Filter

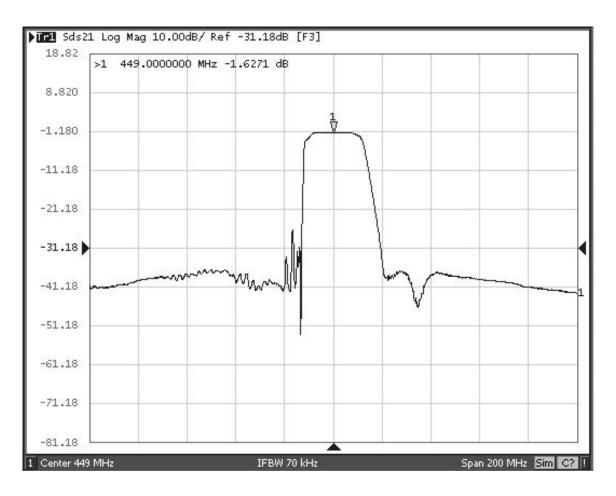


RF3609D-TRC105 Application Circuit

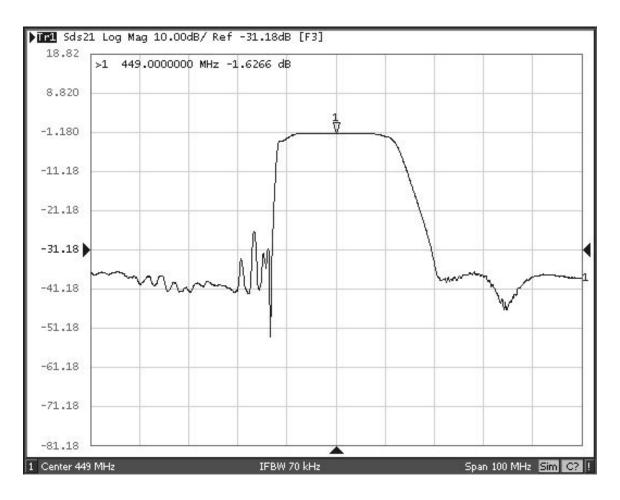
RF3609D Broadband Response, 200 to 2000 MHz



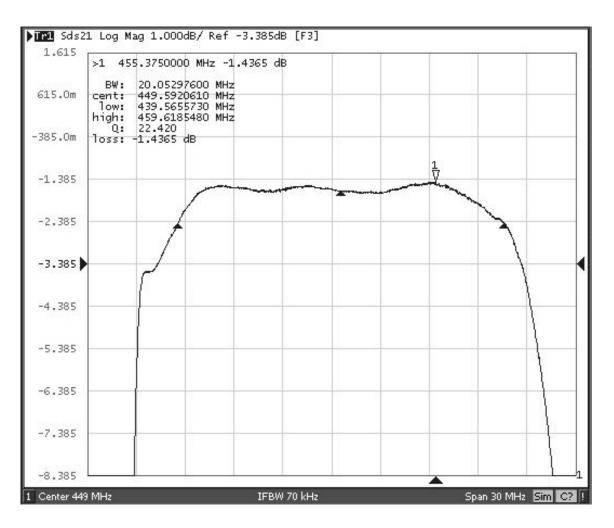
RF3609D Response, 349 to 549 MHz



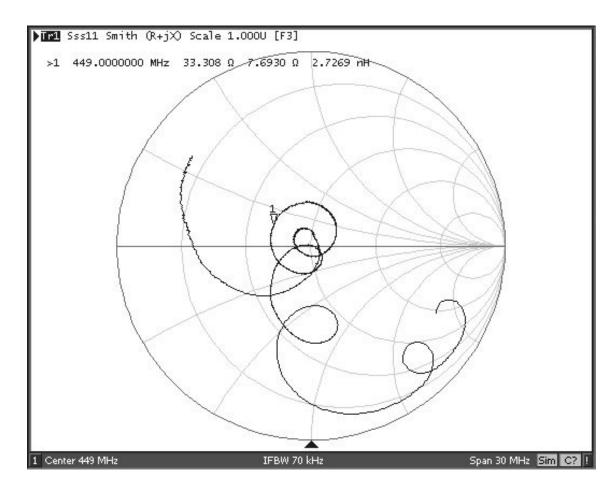
RF3609D Response, 399 to 499 MHz



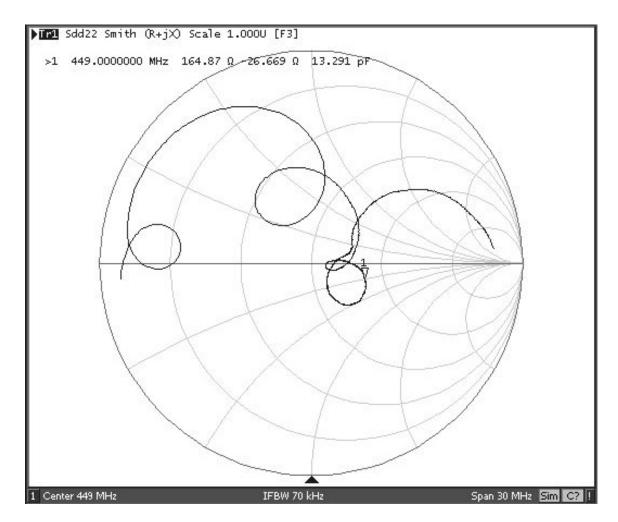
RF3609D Passband Response



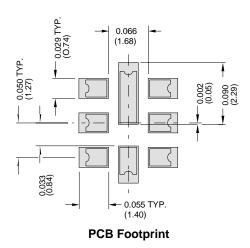








8-Terminal Ceramic Surface-Mount Case 3.8 X 3.8 mm Nominal Footprint

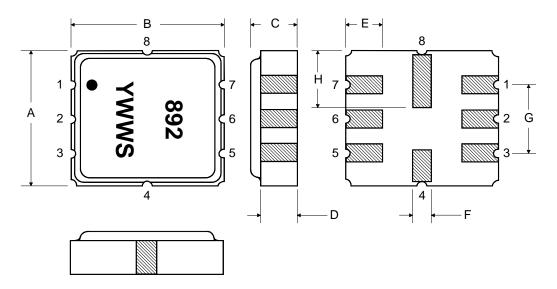


Case Dimensions						
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
Α	3.6	3.8	4.0	0.142	0.150	0.157
В	3.6	3.8	4.0	0.142	0.150	0.157
С	0.90	1.00	1.1	0.035	0.040	0.043
D	0.80	0.90	1.0	0.031	0.035	0.040
E	0.90	1.00	1.10	0.035	0.040	0.043
F	0.50	0.60	0.70	0.020	0.024	0.028
G	2.39	2.54	2.69	0.090	0.100	0.110
Н	1.40	1.75	2.05	0.055	0.069	0.080

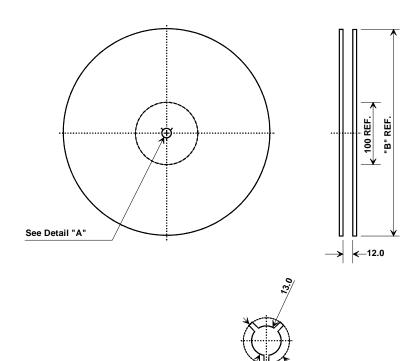
Materials				
Solder Pad Plating	0.3 to 1.0 μm Gold over 1.27 to 8.89 μm Nickel			
Lid Plating	2.0 to 3.0 µm Nickel			
Body	Al ₂ O ₃ Ceramic			
Pb Free				



BOTTOM VIEW



Tape and Reel Specifications



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

COMPONENT ORIENTATION and DIMENSIONS

2.0

Carrier Tape Dimensions				
Ao	4.25 mm			
Во	4.25 mm			
Ко	1.30 mm			
Pitch	8.0 mm			
W	12.0 mm			

