

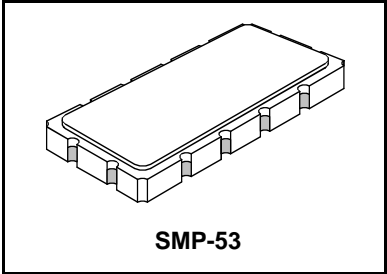


- Excellent Size-to-Performance Ratio
- Hermetic 13.3 x 6.5 mm Surface-mount Case
- Complies with Directive 2002/95/EC (RoHS)



SF2063A

**156 MHz
SAW Filter**



Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+10	dBm
Maximum DC Voltage Between any Two Terminals	30	VDC
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Suitable for Lead-free Soldering - Maximum Soldering Profile	260°C for 30 s	

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Nominal Center Frequency	f_C	1	156.00			MHz
Insertion Loss at f_C	IL			15.5	18	dB
Amplitude Ripple				1.1	2.0	dB _{p-p}
1.5 dB Bandwidth	BW _{1.5}		9.4	10		MHz
Rejection Referenced to IL						
50 to 149 MHz			39	45		dB
165 to 500 MHz			39	45		
Operating Temperature Range	T _A		-40		+85	°C

Impedance Matching to 50Ω Unbalanced	External L-C
Case Style	SMP-53 13.3 x 6.5 mm Nominal Footprint
Lid Symbolization (YY = year, WW = week)	RFM SF2063A YYWW

Electrical Connections

Connection	Terminals
Port 1 Hot	11
Port 1 Gnd Return	12
Port 2 Hot	5
Port 2 Gnd Return	6
Case Ground	All others



CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

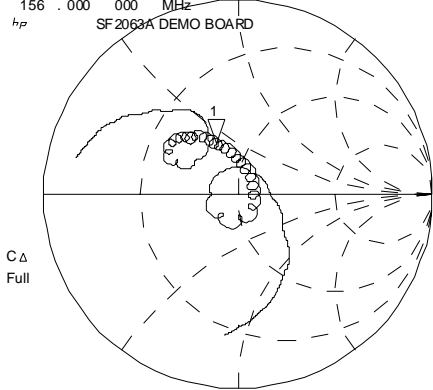
Notes:

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.
2. Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, f_C .
3. The design, manufacturing process, and specifications of this filter are subject to change.
4. US and international patents may apply.

SF2063A S_{11} , S_{22} and Amplitude Response

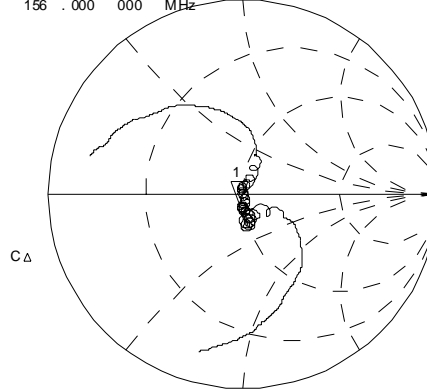
8 Mar 2006 16:19:43

CH1 S11 1 UFS
 1: 35.279 Ω 20.383 Ω 20.795 nH
 156.000 000 MHz
 SF2063A DEMO BOARD



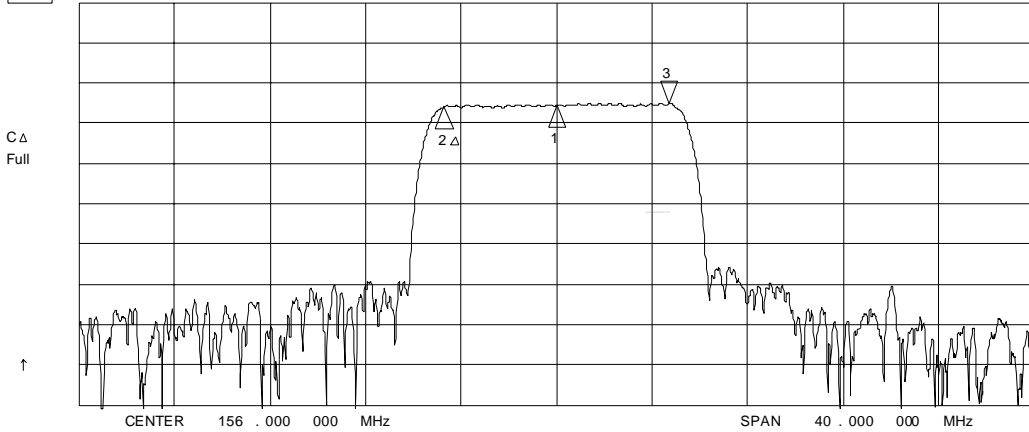
CENTR 156.000 MHz SPAN 32.000 MHz

CH3 S22 1 UFS
 1: 47.971 Ω -4.7188 Ω 216.21 pF
 156.000 000 MHz



CENTR 156.000 MHz SPAN 32.000 MHz

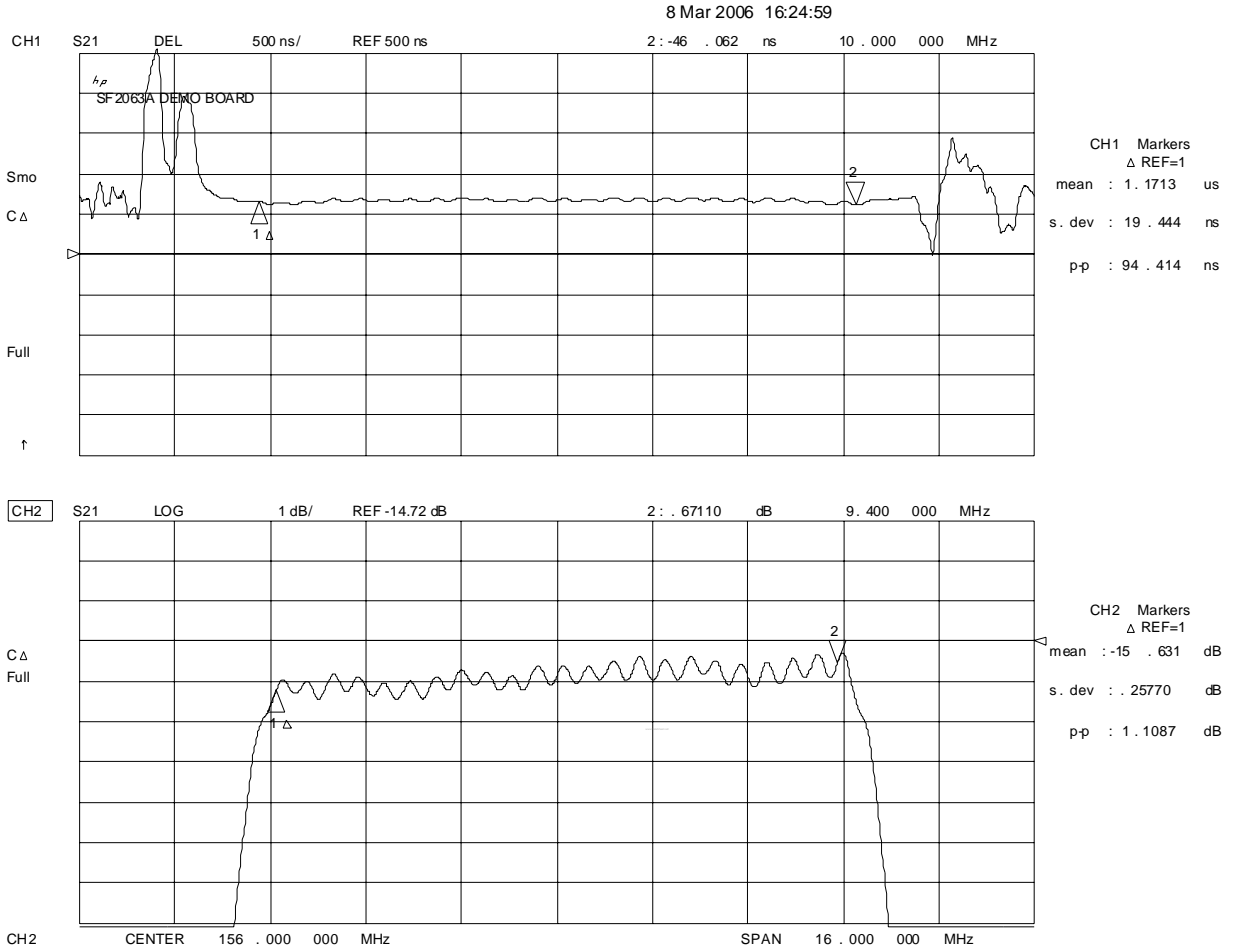
CH2 S21 LOG 10 dB/ REF -20 dB 3: .66240 dB 9.400 000 MHz



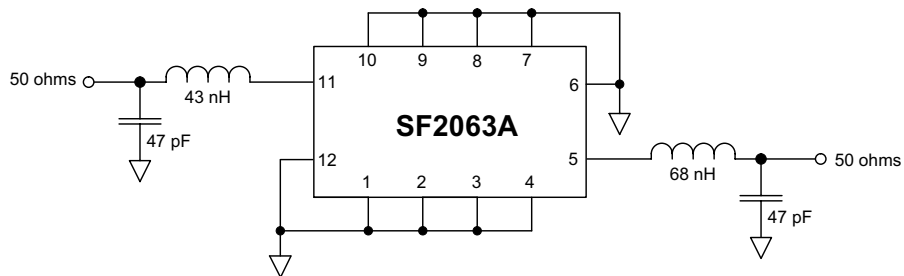
CENTER 156.000 000 MHz SPAN 40.000 000 MHz

CH2 Markers
 Δ REF=2
 mean : -15.645 dB
 s. dev : .25400 dB
 p-p : 1.0964 dB

SF2063A Passband Group Delay and Amplitude Ripple

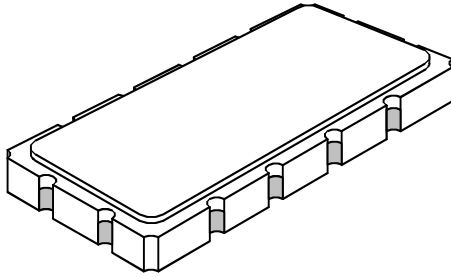


SF2063A Matching Components



SMP-53 Case

12-Terminal Ceramic Surface-Mount Case 13.3 x 6.5 mm Nominal Footprint



Case Dimensions

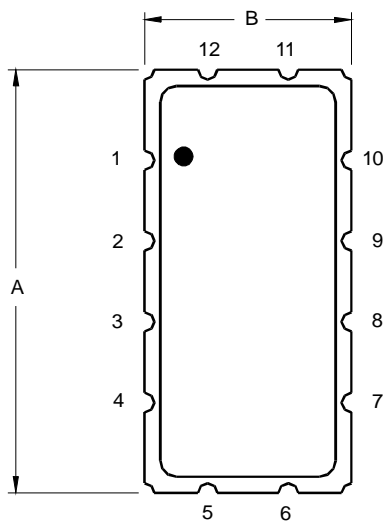
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	13.08	13.31	13.60	0.515	0.524	0.535
B	6.27	6.50	6.80	0.247	0.256	0.268
C		1.91	2.00		0.075	0.079
D		1.50			0.059	
E		0.79			0.031	
H		1.0			0.039	
P		2.54			0.100	

Electrical Connections

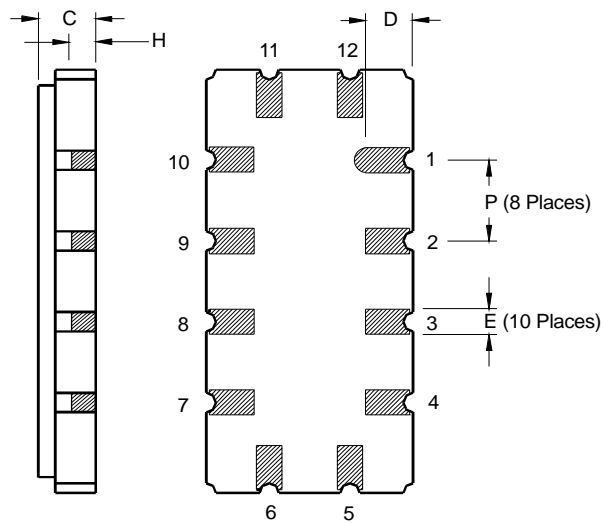
Connection		Terminals
Port 1	Input or Return	11
	Return or Input	12
Port 2	Output or Return	5
	Return or Output	6
Ground		All others
Single-ended Operation		Return is ground
Differential Operation		Return is hot

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_2O_3 Ceramic
Pb Free	



TOP VIEW



BOTTOM VIEW