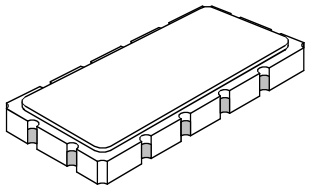
SF2064A

156 MHz SAW Filter

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



SMP-53

Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+10	dBm
Max. DC voltage between any 2 terminals	30	VDC
Storage Temperature Range	-40 to +85	°C
Suitable for lead-free soldering - Max. Soldering Profile	260°C for 30 s	

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Nominal Center Frequency	f_C	1		156.000		MHz
Insertion Loss CPK>1.33				15	18	dB
Passband -1dB Pass Bandwidth Definition	BW_1		10	10.8		MHz
-3dB Pass Bandwidth Definition	BW_3		10.6	11		
-40dB Pass Bandwidth Definition	BW_{40}			13.15	15	
Amplitude Ripple				1	2	dBp-p
Stopband Rejection 0~110MHz 250MHz~1GHz			45	55		dB
Group Delay Variation (Pass Bandwidth)				30	100	Nsp-p
Absolute Delay at fO				1.13	1.5	usec
Temperature Coefficient of Frequency				-35	-40	ppm/°C
Source Impedance				50		ohm
Input VSWR				1.1		
Output VSWR				1.7		
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 SF2064A YYWW

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, fc.
3. The design, manufacturing process, and specifications of this filter are subject to change.
4. US and international patents may apply.
5. Electrostatic Sensitive Device. Observe precautions for handling.

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

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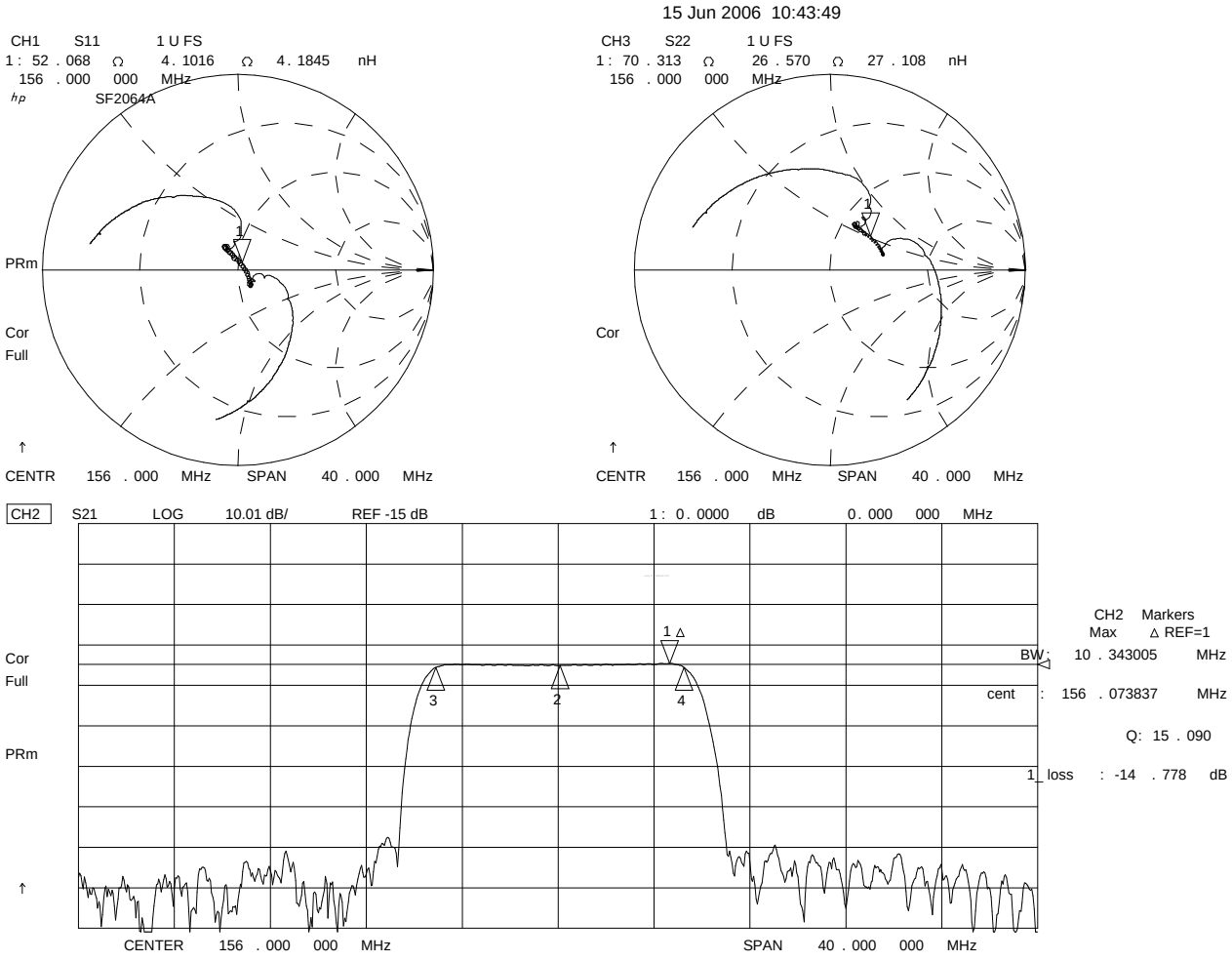
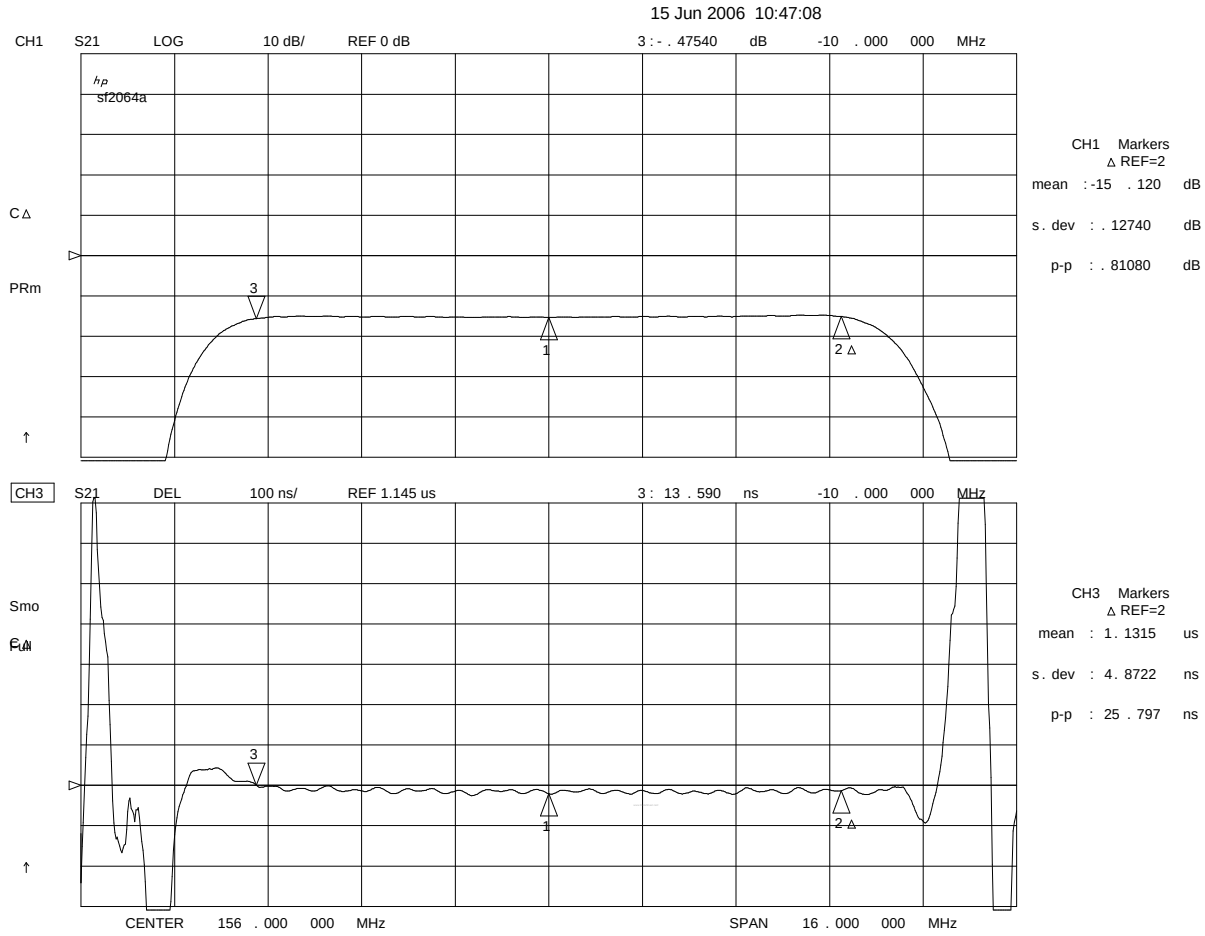
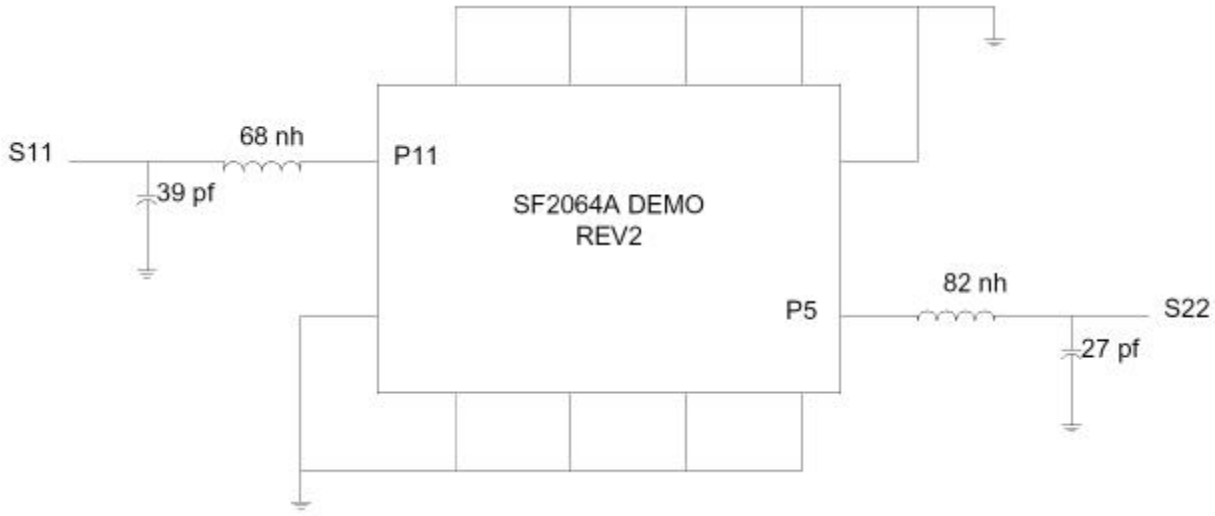
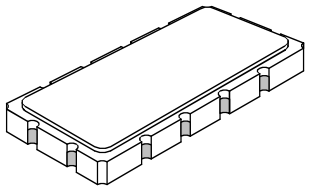






SMP-53 Case

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



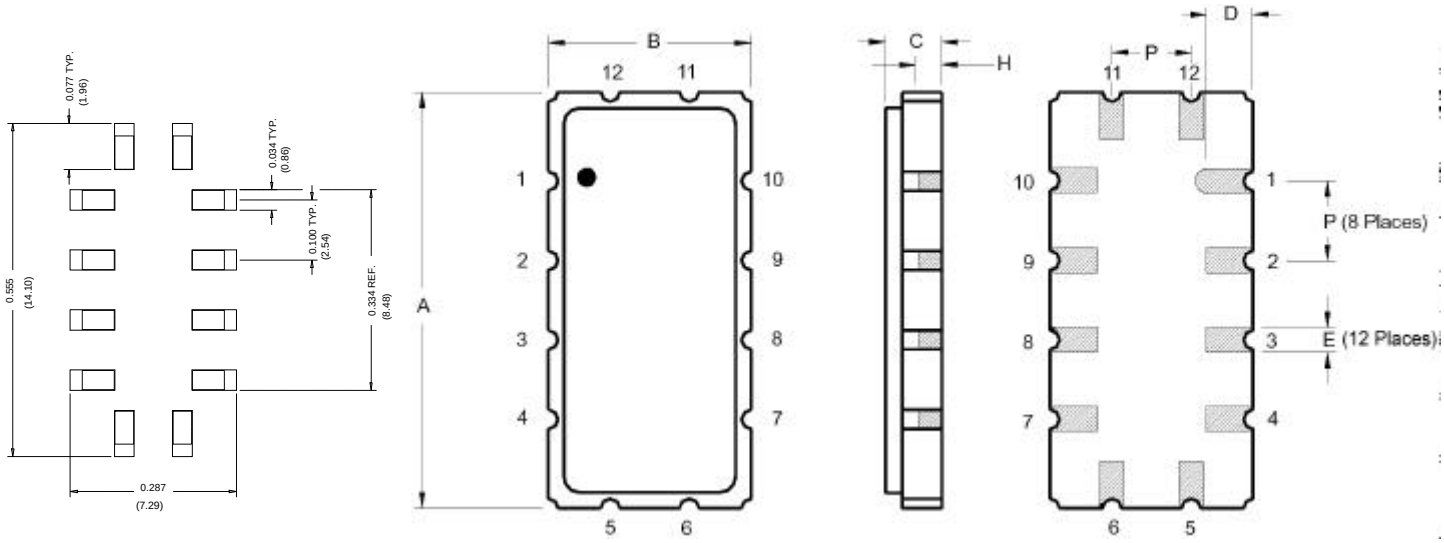
Case Dimensions

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	

Materials	
Solder Pad Termination	Au plating 30 - 60 uInches (76.2-152 uM) over 80-200 uInches (203-508 uM) Ni.
Lid	Fe-Ni-Co Alloy Electroless Nickel Plate (8-11% Phosphorus) 100-200 uInches Thick
Body	Al_2O_3 Ceramic
Pb Free	

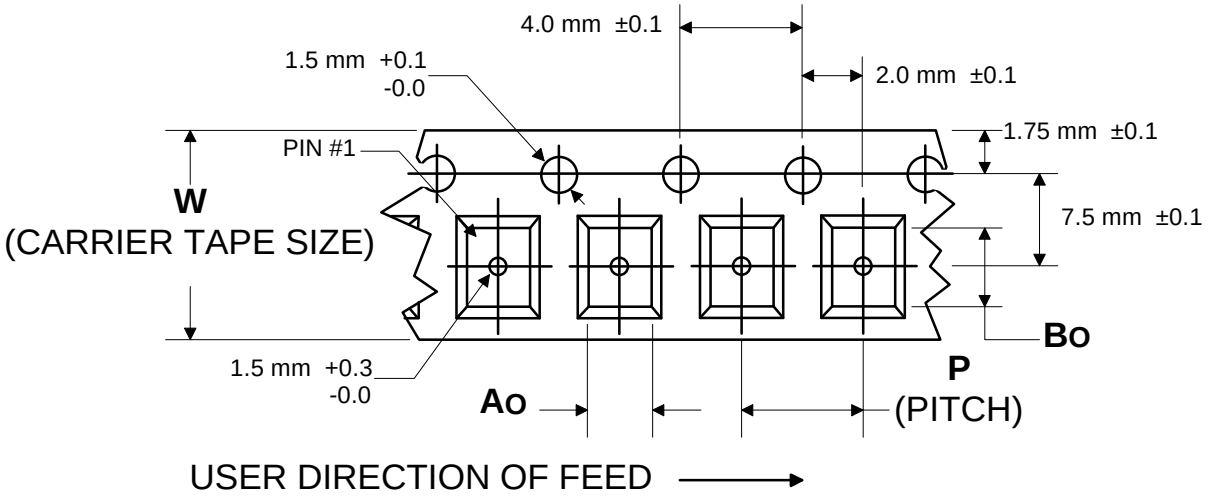
Electrical Connections

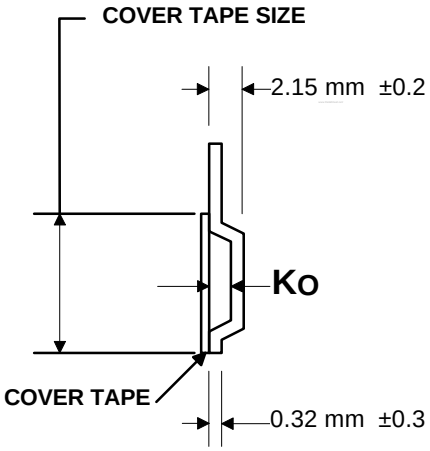
Connection		Terminals
Port 1	Input or Return	11
	Return or Input	12
Port 2	Output or Return	5
	Return or Output	6
Ground		All others
Single Ended Operation		**Return is ground**
Differential Operation		**Return is hot**



TOP VIEW BOTTOM VIEW

COMPONENT ORIENTATION and DIMENSIONS





Carrier Tape Dimensions		
Ao	7.55 mm	±0.1
Bo	9.59 mm	±0.1
Ko	2.30 mm	±0.1
Pitch	12.0 mm	±0.1
W	16.0 mm	±0.3