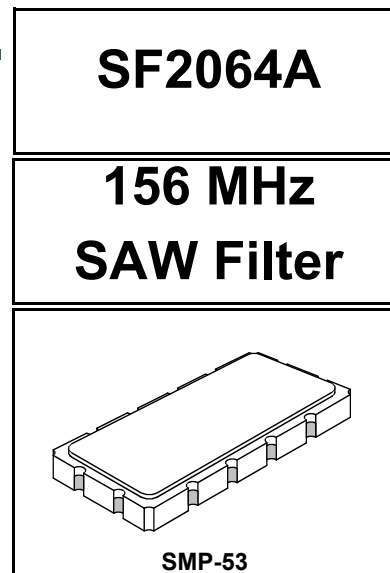


- **Excellent Size-to-Performance Ratio**
- **Hermetic 13.3 x 6.5 mm Surface-mount Case**
- **Complies with Directive 2002/95/EC (RoHS)**
- **Moisture Sensitivity Level: 1**

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	



Characteristic	Sym	Notes	Min	Typ	Max	Units
Nominal Center Frequency	f_C			156.000		MHz
Insertion Loss CPK>1.33				15	18	dB
Passband -1dB Pass Bandwidth Definition -3dB Pass Bandwidth Definition -40dB Pass Bandwidth Definition Amplitude Ripple	BW_1		10	10.8		MHz
	BW_3		10.6	11		
	BW_{40}			13.15	15	
Stopband Rejection 0~110MHz 250MHz~1GHz			45	55		dB
Group Delay Variation (Pass Bandwidth)				30	100	Nsp-p
Absolute Delay at f_0				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, S = Shift, = Sequence Code)	RFM SF2064A YYWWS##

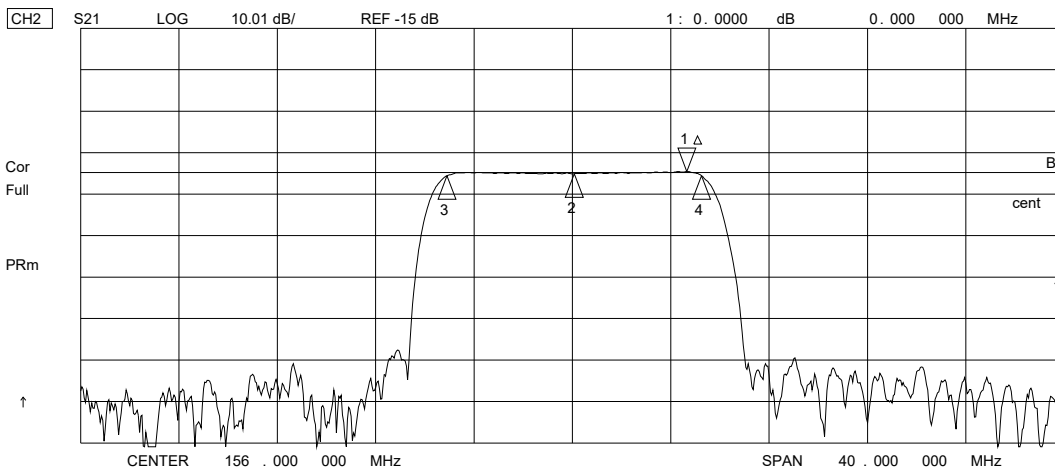
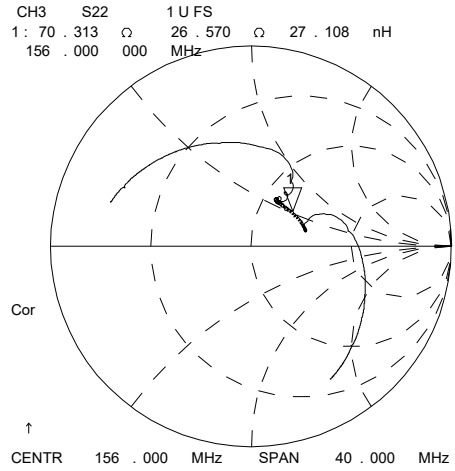
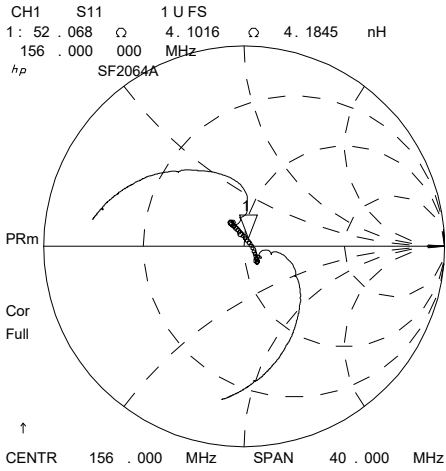
Electrical Connections

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

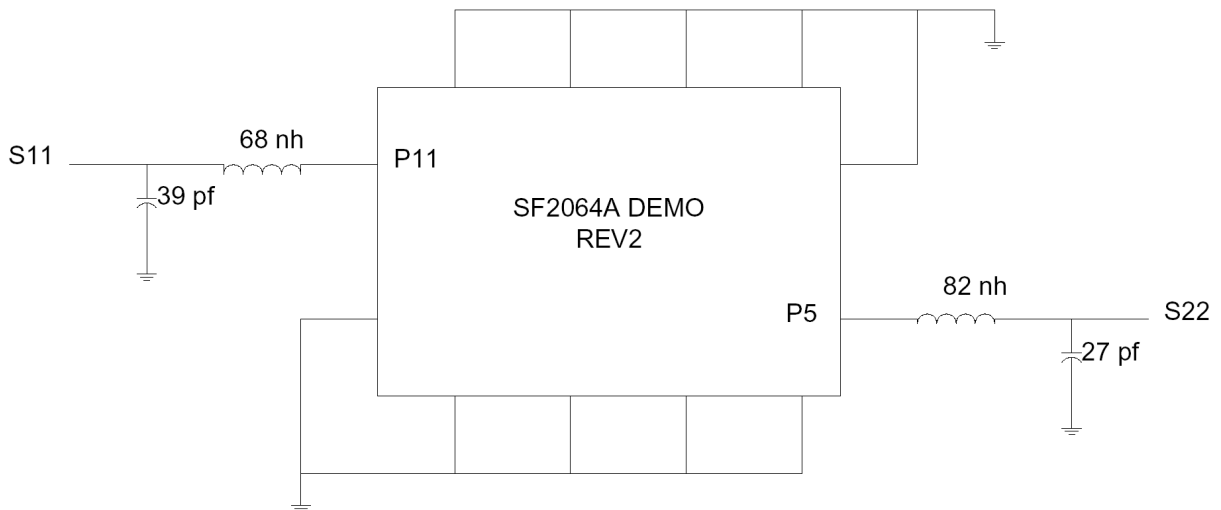
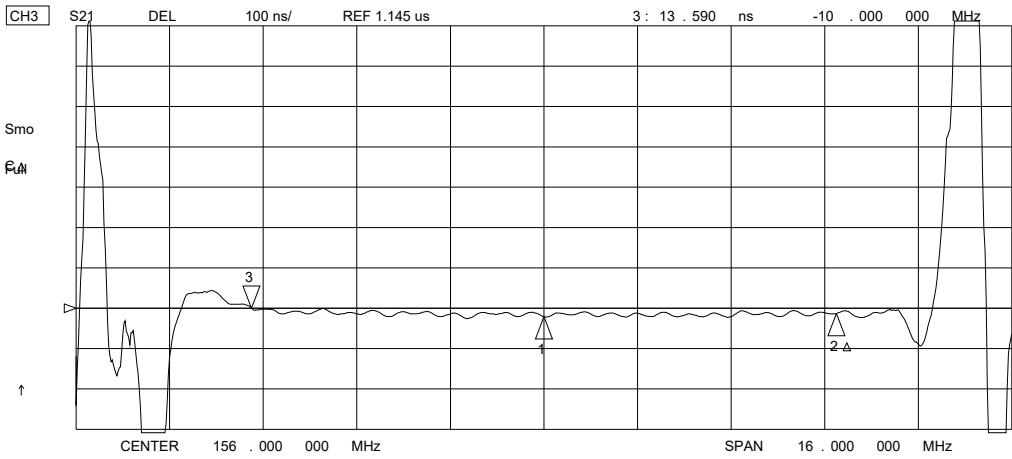
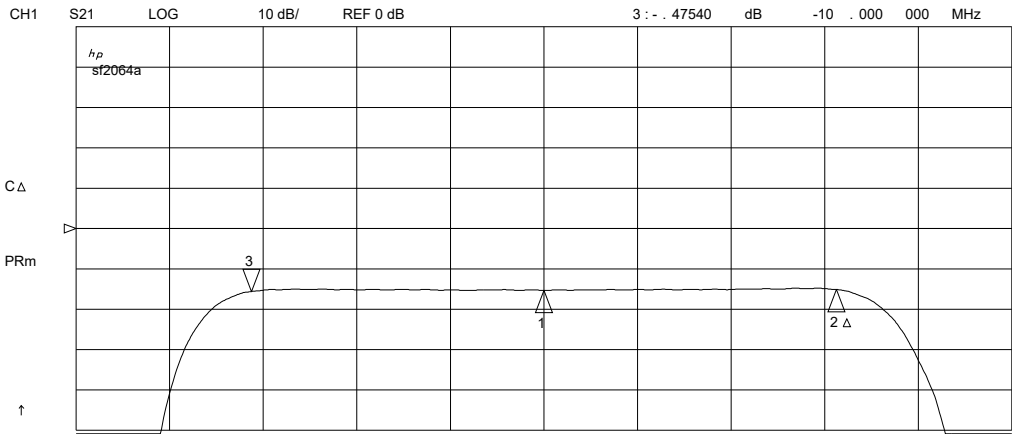
 **CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**
NOTES:

1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

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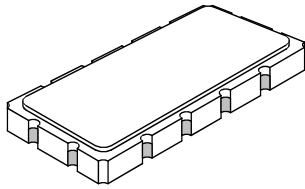


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SMP-53 Case

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



Case Dimensions

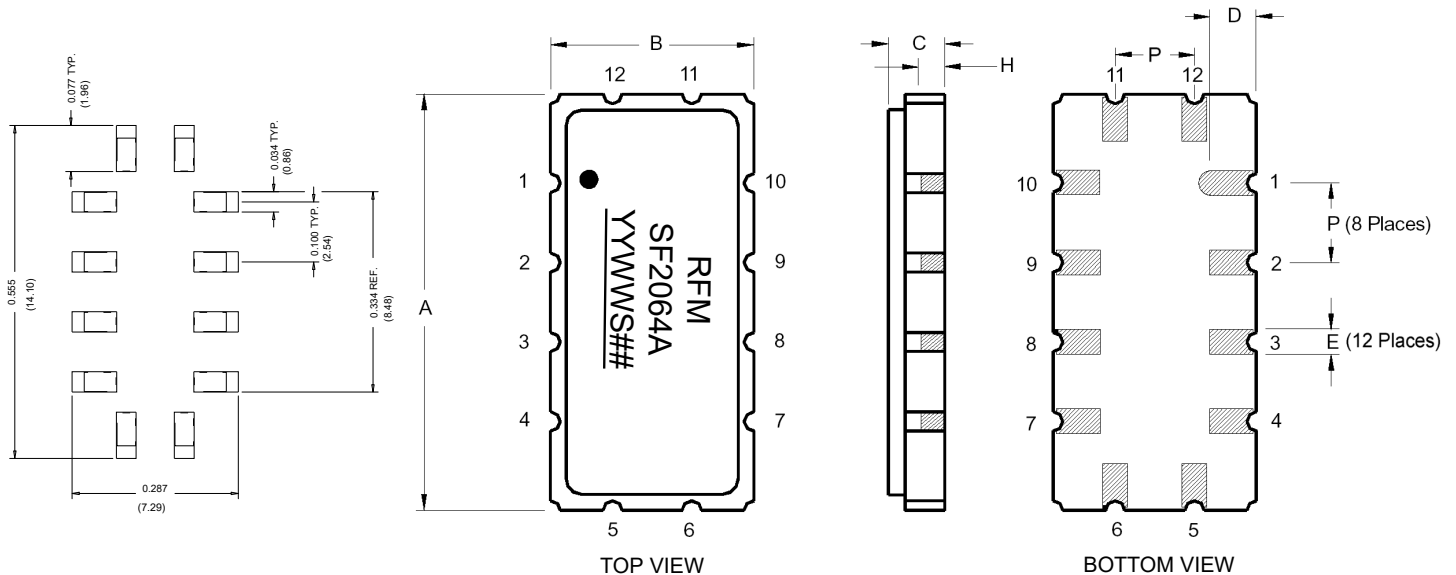
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	13.08	13.31	13.60	0.515	0.524	0.535
B	6.27	6.50	6.80	0.247	0.256	0.268
C		1.91	2.00		0.075	0.079
D		1.50			0.059	
E		0.79			0.031	
H		1.0			0.039	
P		2.54			0.100	

Materials

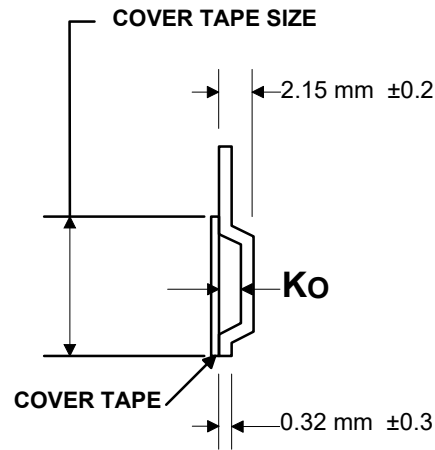
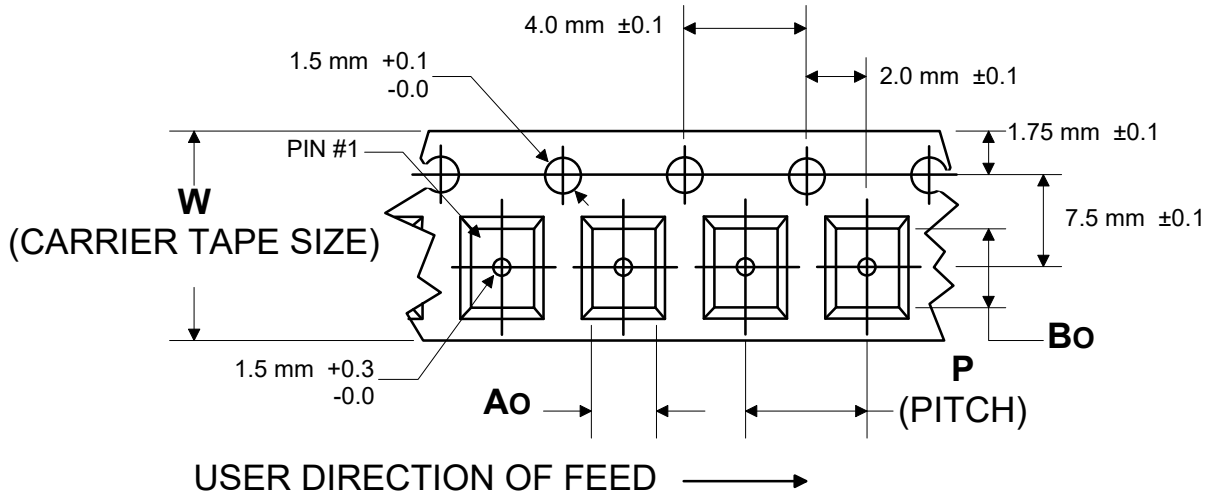
Solder Pad Termination	Au plating 30 - 60 ulnches (76.2-152 uM) over 80-200 ulnches (203-508 uM) Ni.
Lid	Fe-Ni-Co Alloy Electroless Nickel Plate (8-11% Phosphorus) 100-200 ulnches Thick
Body	Al ₂ O ₃ Ceramic

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



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

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.

