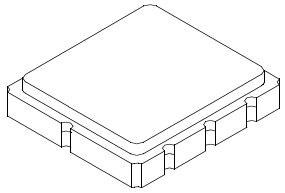
SF1189B

280.00 MHz SAW Filter

- ***Designed for WLAN IF Applications***
- ***Low Insertion Loss***
- ***5.0 x 5.0 x 1.7 mm Suface-Mount Case***
- ***Single Ended or Differential Input and Output***



SM5050-8

Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+10	dBm
Max. DC voltage between any 2 terminals	0	VDC
Storage Temperature Range	-40 to +85	°C
Max Soldering Profile	265°C for 10 s	

Electrical Characteristics

Characteristic		Sym	Notes	Min	Typ	Max	Units
Nominal Center Frequency		f_C	1		280.0		MHz
Passband	Insertion Loss at fc	IL			8.2	8.5	dB
	3 dB Passband	BW_3	1, 2	18.5	20.1		MHz
	Amplitude Ripple over fc ±9.0 MHz				2.0	2.5	dB_{P-P}
	Group Delay Variation over fc ±9.0	GDV			72	100	ns_{P-P}
Rejection	fc -60 to fc -40 MHz		1, 2, 3	40	47		dB
	fc -40 to fc -22 MHz			38	41		
	fc -22 to fc -17 MHz			30	39		
	fc +17 to fc +22 MHz			25	36		
	fc +22 to fc +40 MHz			34	36		
	fc +40 to fc +60 MHz			40	41		
Operating Temperature Range		T_A	1	-10		+85	°C

Differential Input / Output Impedance Match	External L-C
Case Style	SM5050-8 5 X 5 mm Nominal Footprint
Lid Symbolization (YY=year, WW=week, S=shift)	453, YYWWS

Electrical Connections

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

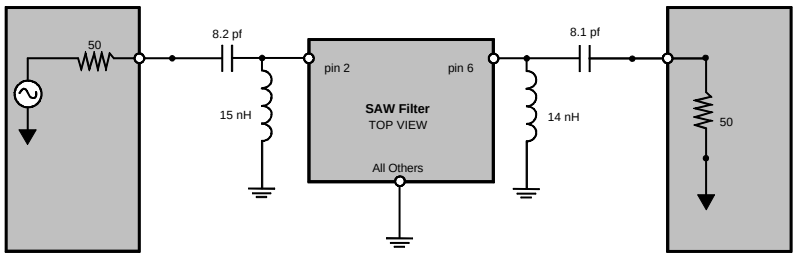


figure 1

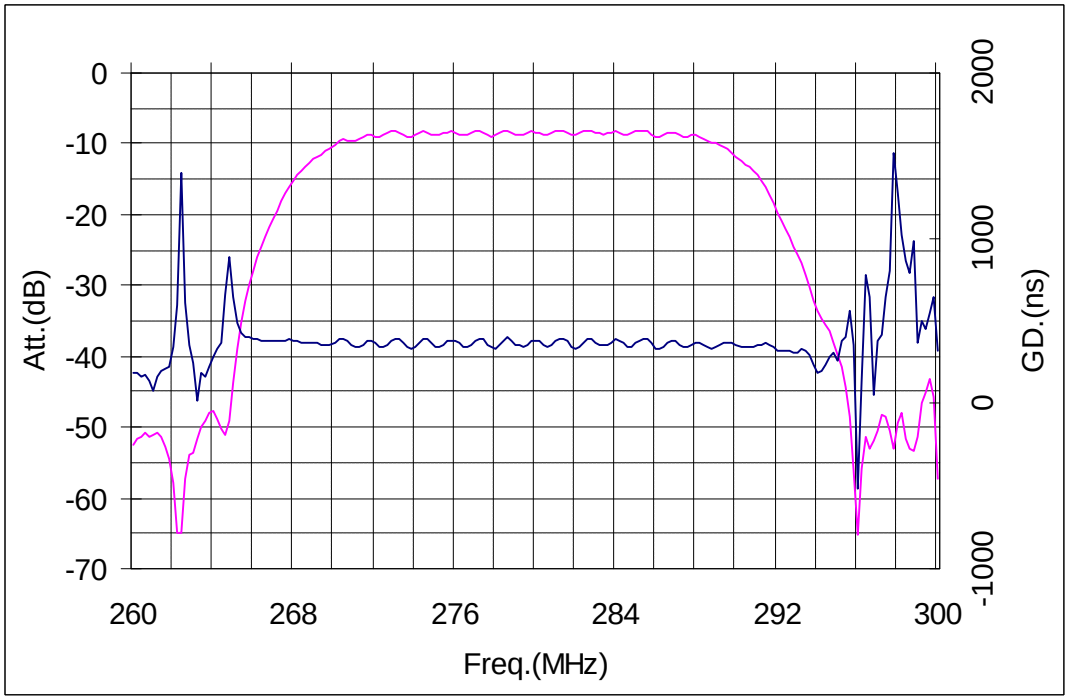
Notes:

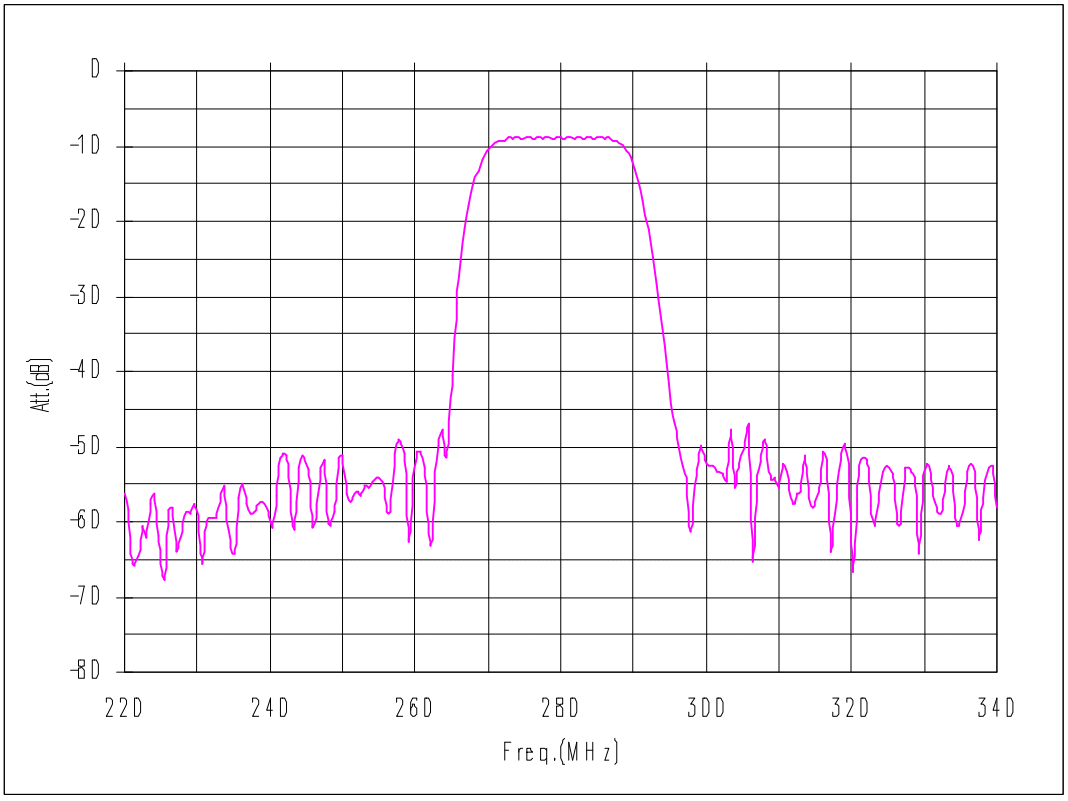
1. Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50 Ω and measured with 50 Ω network analyzer.
2. Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, fc.
3. 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.
4. The design, manufacturing process, and specifications of this filter are subject to change.
5. Either Port 1 or Port 2 may be used for either input or output in the design. However, impedances and impedance matching may vary between Port 1 and Port 2, so that the filter must always be installed in one direction per the circuit design.
6. US and international patents may apply.
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9. Electrostatic Sensitive Device. Observe precautions for handling

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Frequency Characteristics

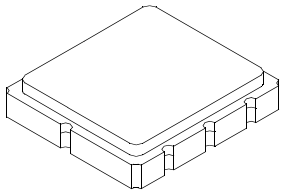




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SM5050-8 Case

8-Terminal Ceramic Surface-Mount Case
5.0 X 5.0 mm Nominal Footprint



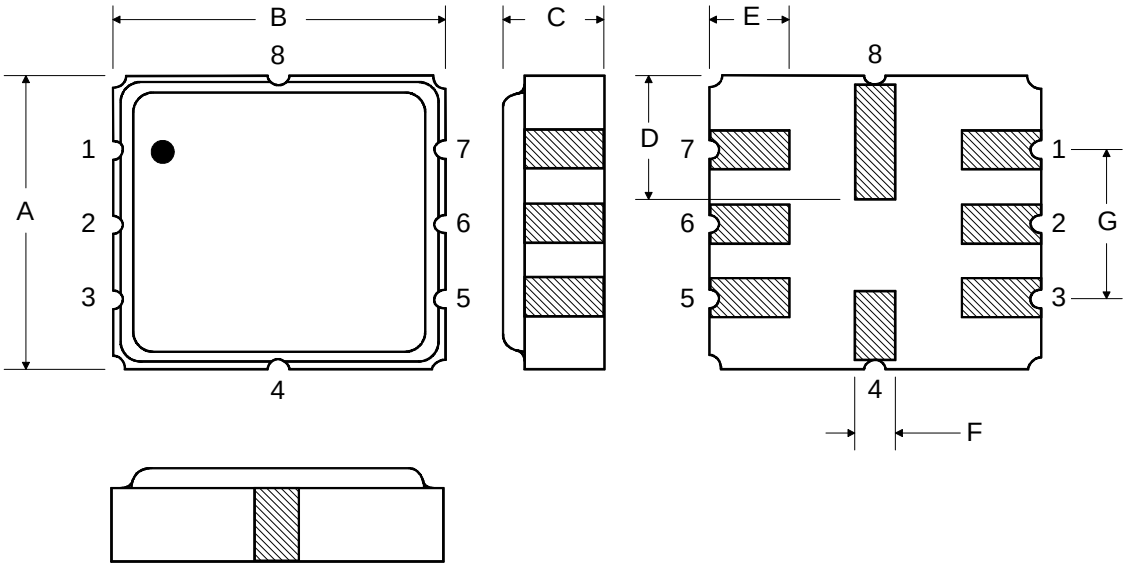
Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	4.8	5.0	5.2		0.1968	
B	4.8	5.0	5.2		0.1968	
C			1.7			0.0669
D		2.08			0.0818	
E		1.17			0.046	
F		0.64			0.0252	
G	2.39	2.54	2.69		0.100	

Electrical Connections

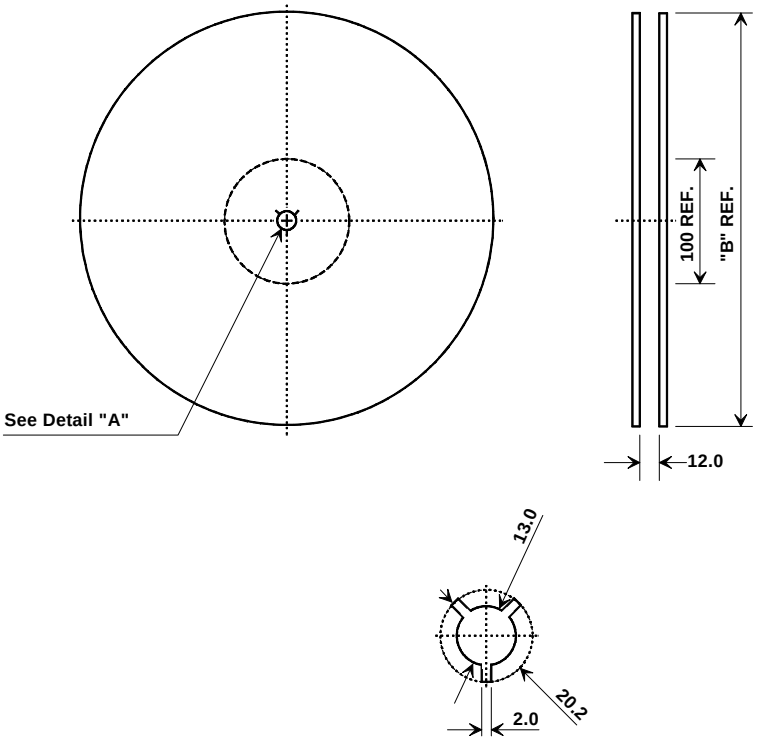
Connection	Terminals
Input	2
Output	6
Ground	All others
Single Ended Operation	**Return is ground**
Differential Operation	**Return is hot**
Dot indicates Pin 1	

TOP VIEW BOTTOM VIEW



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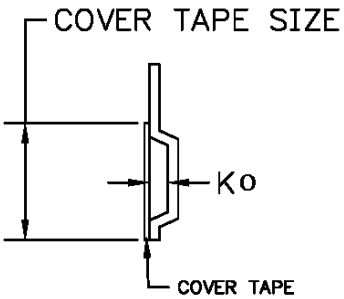
Tape and Reel Specifications

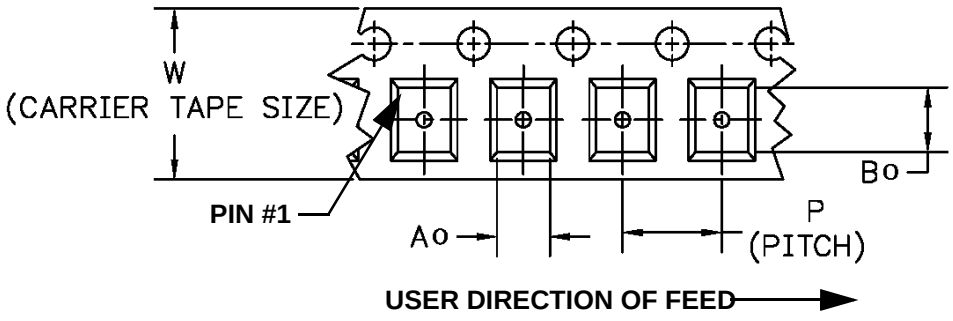


"B " Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	3000

COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	5.3 mm
Bo	5.3 mm
Ko	2.0 mm
Pitch	8.0 mm
W	12.0 mm





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