



AEC-Q200

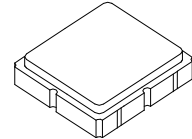
This component was always RoHS compliant from the first date of manufacture.

- Designed for 802.11 Applications
- Hermetically sealed Surface Mount package
- Complies with Directive 2002/95/EC (RoHS)



**SF1174D**

**374.00 MHz  
SAW Filter**



SM3838-8 Case

**Absolute Maximum Ratings**

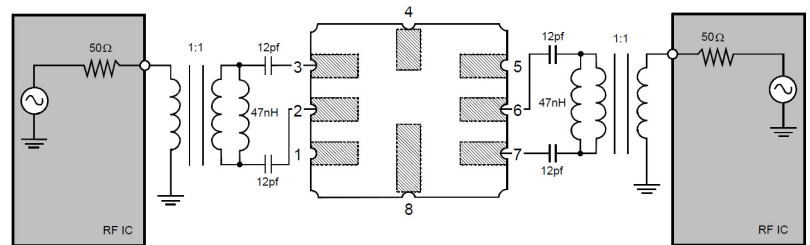
Rating	Value	Units
Maximum Input Power	+10	dBm
DC Voltage Between Terminals	30	VDC
Case Temperature	-40 to +85	°C
Suitable for lead-free soldering - Max Soldering Profile	260°C for 30 s	

**Electrical Characteristics**

Characteristic	Sym	Notes	Minimum	Typical	Maximum	Units
Nominal Operating Frequency	$f_c$			374		MHz
Passband	Insertion Loss	IL		8.6	10	dB
			3.0 dB Bandwidth	17	23.3	MHz
Amplitude Ripple	$F_c \pm 7$ MHz			.6	1.0	dB
Group Delay Deviation	$F_c \pm 7$ MHz			45	100	nsec
Rejection	$F_c - 100$ to $-33$ MHz		40	47		dB
	$F_c - 33$ to $-22$ MHz		40	48		dB
	$F_c - 22$ to $-16.5$ MHz		27	40		dB
	$F_c + 16.5$ to $+22$ MHz		28	44		dB
	$F_c + 22$ to $+43$ MHz		35	44		dB
Ambient Temperature	Operating Range		-20		70	°C
Footprint Size: 3.8 X 3.8	SM3838-8					
Lid Symbolization (Y=Year, WW=week, S=shift)	479, YWWS					

**Electrical Connections**

Connection	Terminals
Differential Input	2, 3
Differential Output	6, 7
Ground	All Others

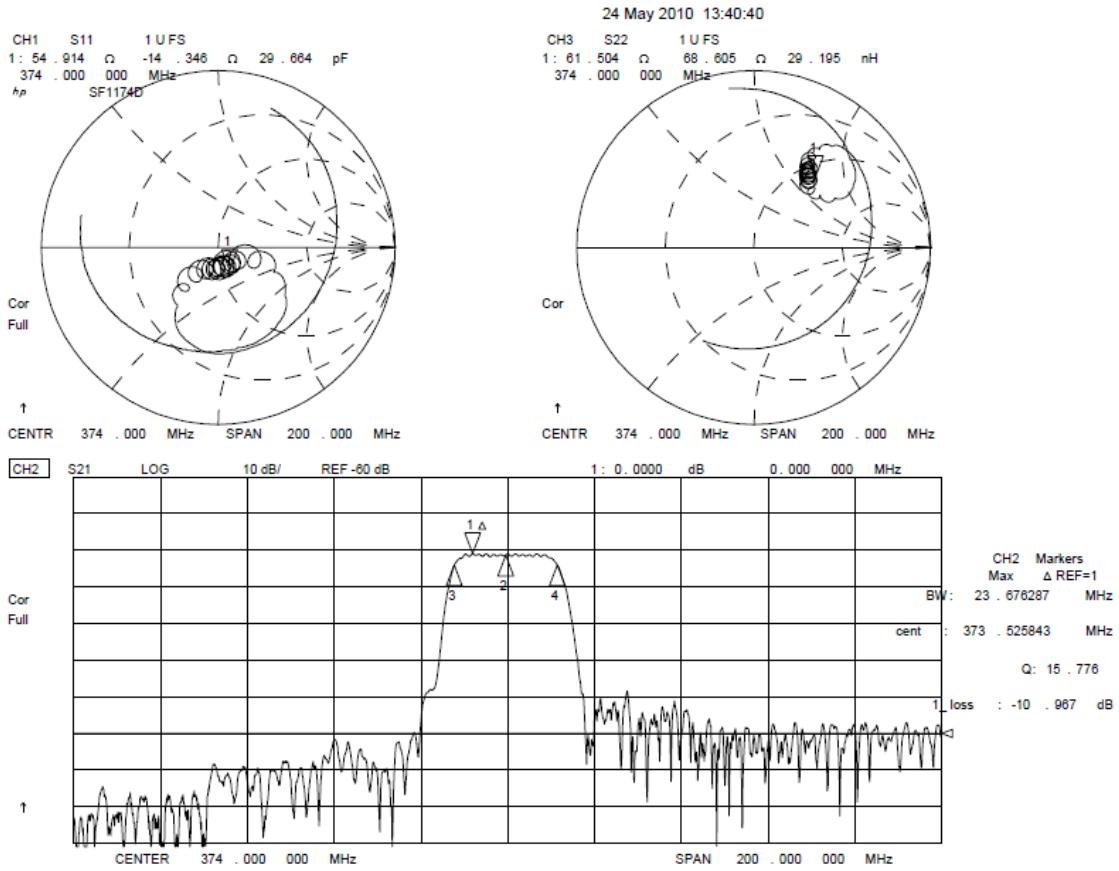


**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

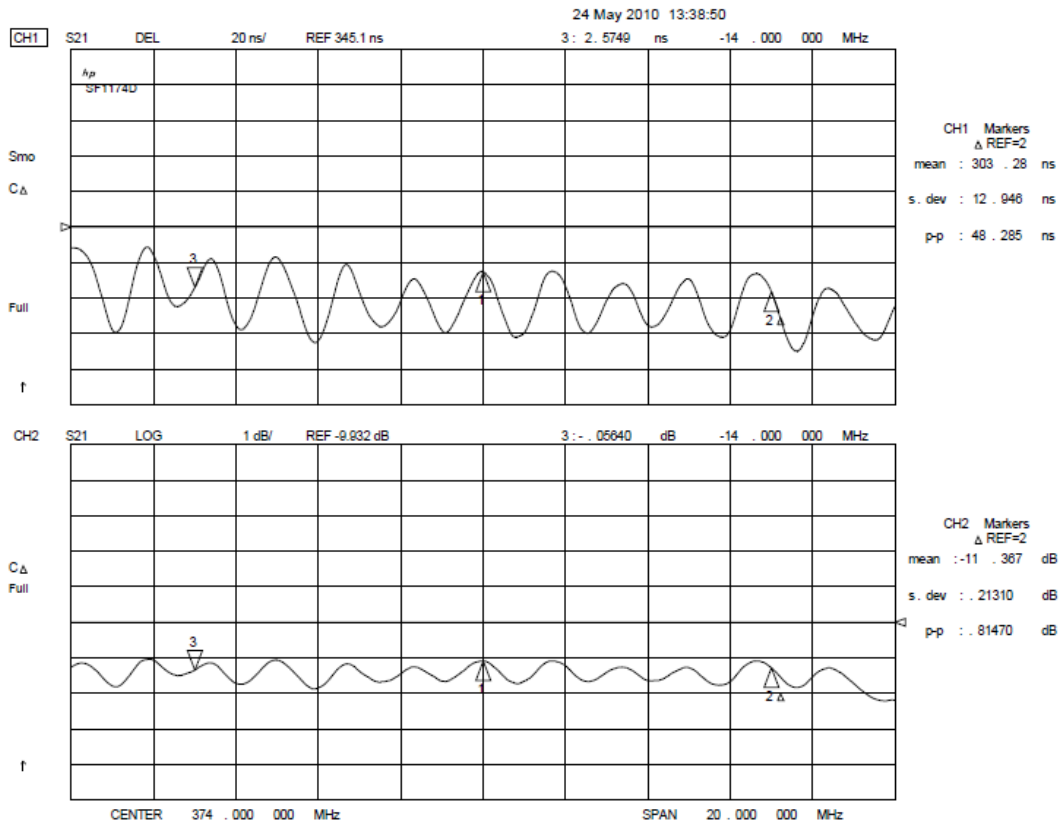
**NOTES:**

1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.

# SF1174D DEMO



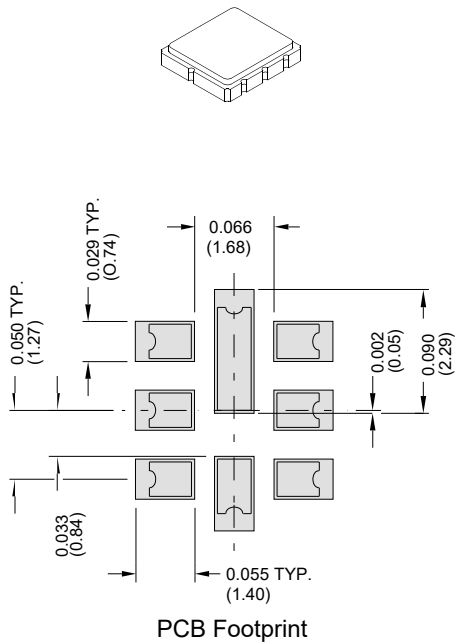
# SF1174D DEMO



# SM3838-8 Case

## 8-Terminal Ceramic Surface-Mount Case

### 3.8 X 3.8 mm Nominal Footprint



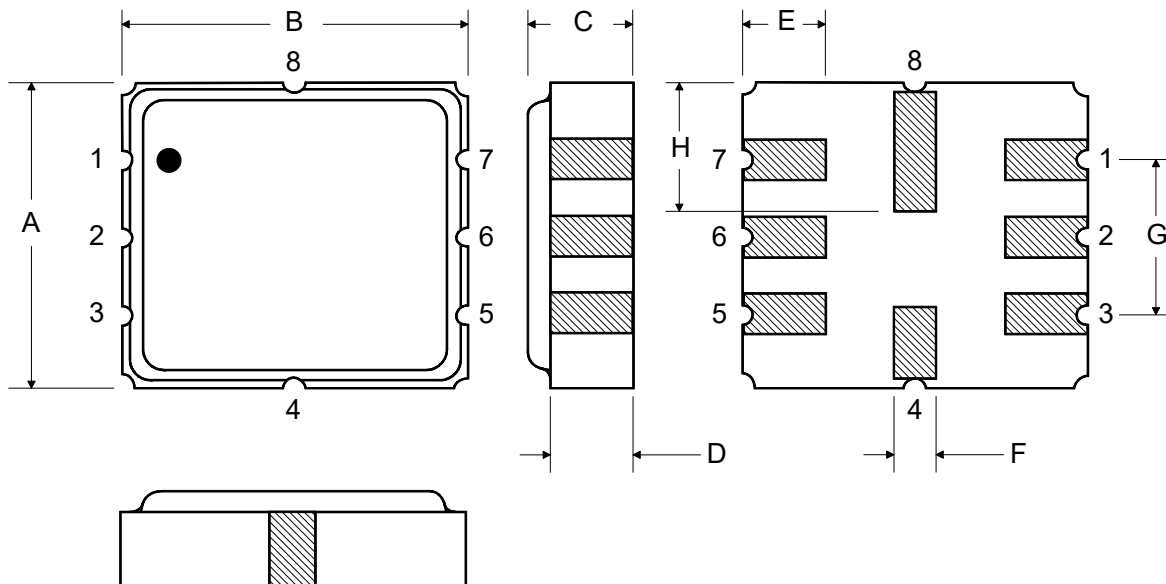
Case Dimensions						
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.6	3.8	4.0		0.15	
B	3.6	3.8	4.0		0.15	
C			1.25		0.06	
D		1.0			0.04	
E		1.0			0.04	
F		0.6			0.02	
G	2.39	2.54	2.69		0.100	
H		1.5			0.06	

Electrical Connections		
	Connection	Terminals
Port 1	Differential Input	2, 3
Port 2	Differential Output	6, 7
	Ground	All Others
<b>Single Ended Operation</b>		<b>Return is Ground</b>
<b>Differential Operation</b>		<b>Return is Hot</b>
Dot Indicates Pin 1		

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 <sub>2</sub> O <sub>3</sub> Ceramic

TOP VIEW

BOTTOM VIEW





## 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.

