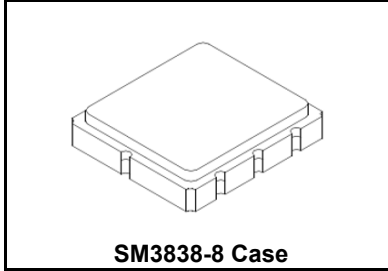


SF1174D

374.00 MHz
SAW Filter



- *Designed for 802.11 Applications*
- *Hermetically sealed Surface Mount package*
- *Complies with Directive 2002/95/EC (RoHS)*
- *Moisture Sensitivity Level: 1*

Absolute Maximum Ratings

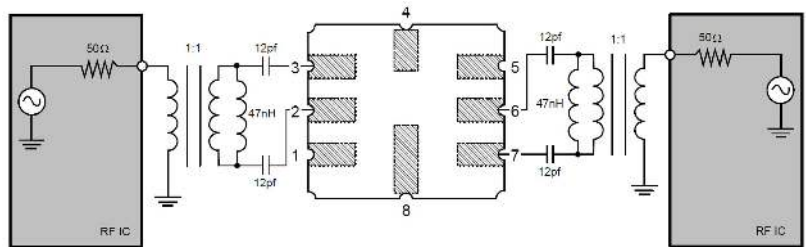
Rating	Value	Units
Maximum Input Power	+10	dBm
DC Voltage Between Terminals	30	VDC
Case Temperature	-40 to +85	°C
Suitable for lead-free soldering - Max Soldering Profile	260°C for 30 s	

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

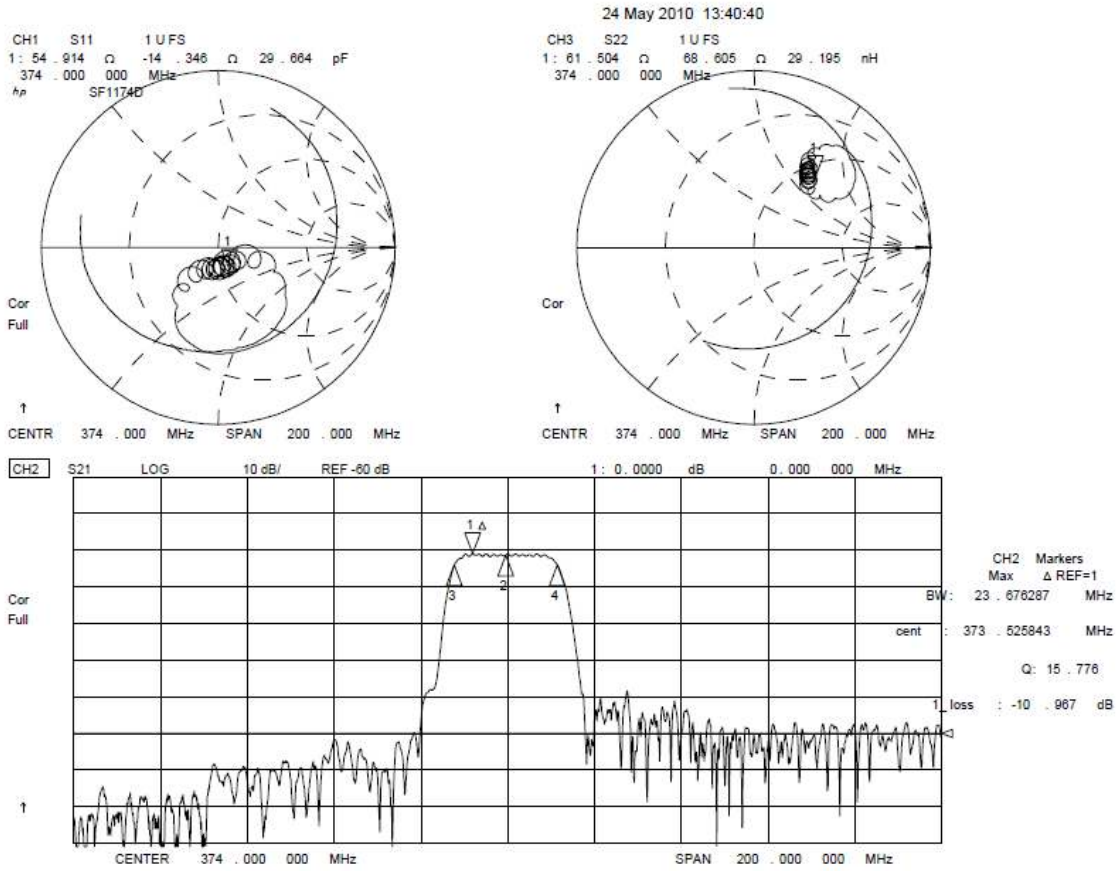


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

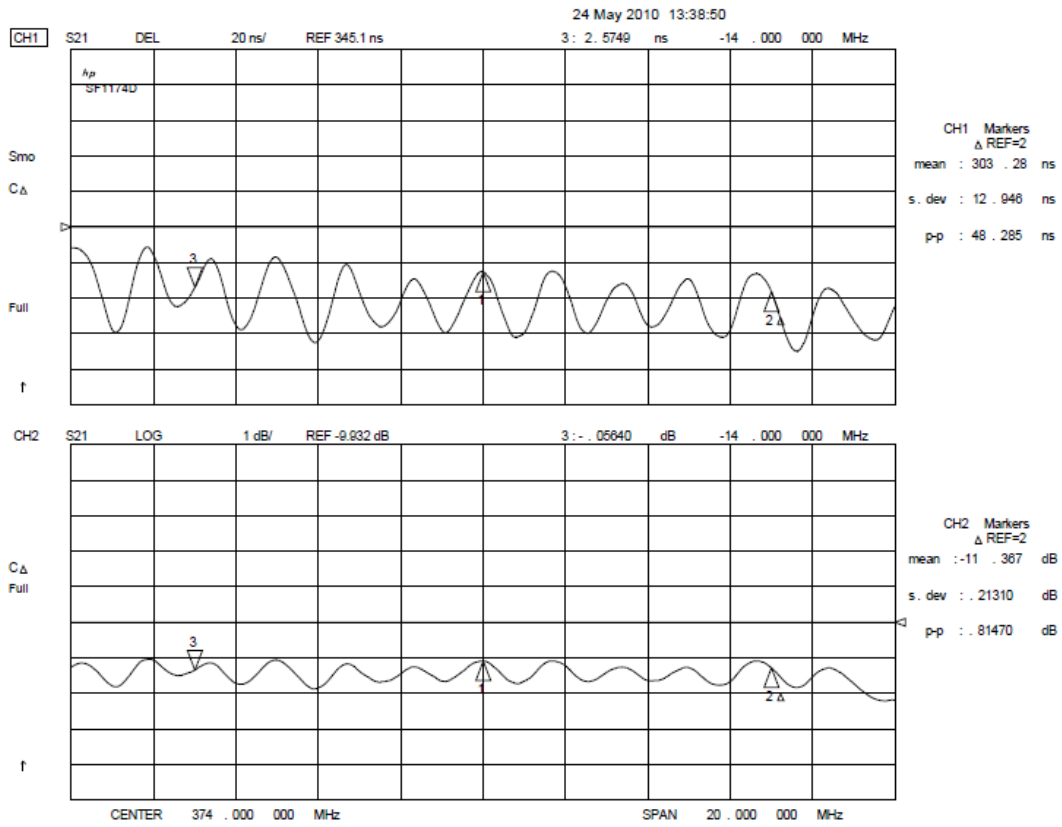
NOTES:

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

SF1174D DEMO



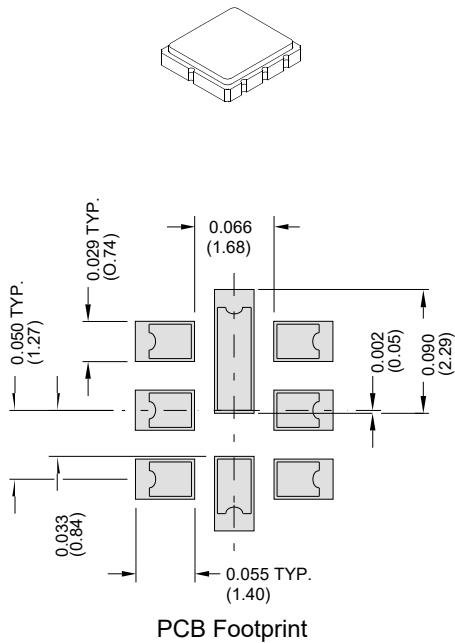
SF1174D DEMO



SM3838-8 Case

8-Terminal Ceramic Surface-Mount Case

3.8 X 3.8 mm Nominal Footprint

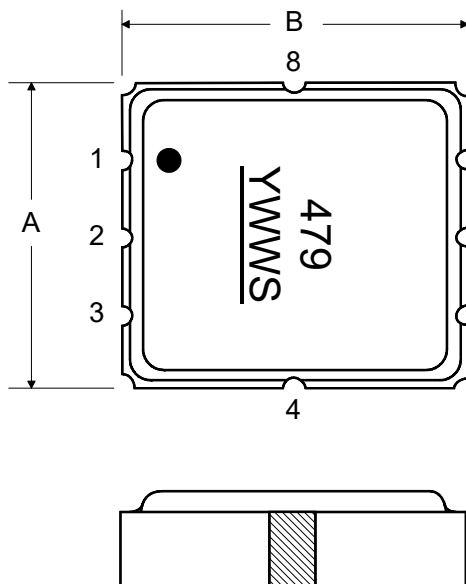


Case Dimensions						
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.6	3.8	4.0		0.15	
B	3.6	3.8	4.0		0.15	
C			1.25		0.06	
D		1.0			0.04	
E		1.0			0.04	
F		0.6			0.02	
G	2.39	2.54	2.69		0.100	
H		1.5			0.06	

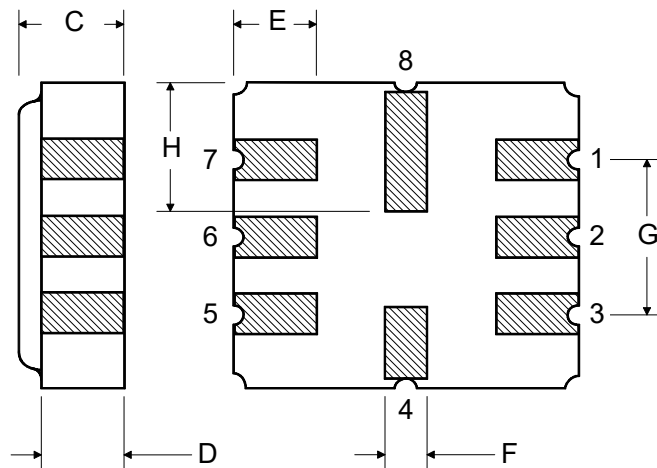
Electrical Connections		
	Connection	Terminals
Port 1	Differential Input	2, 3
Port 2	Differential Output	6, 7
	Ground	All Others
Single Ended Operation		Return is Ground
Differential Operation		Return is Hot
Dot Indicates Pin 1		

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 ₂ O ₃ Ceramic

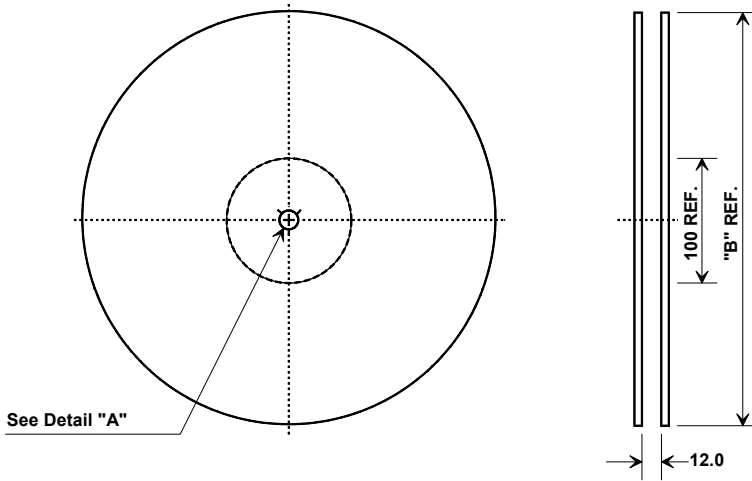
TOP VIEW



BOTTOM VIEW

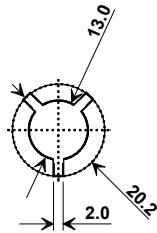


Tape and Reel Specifications



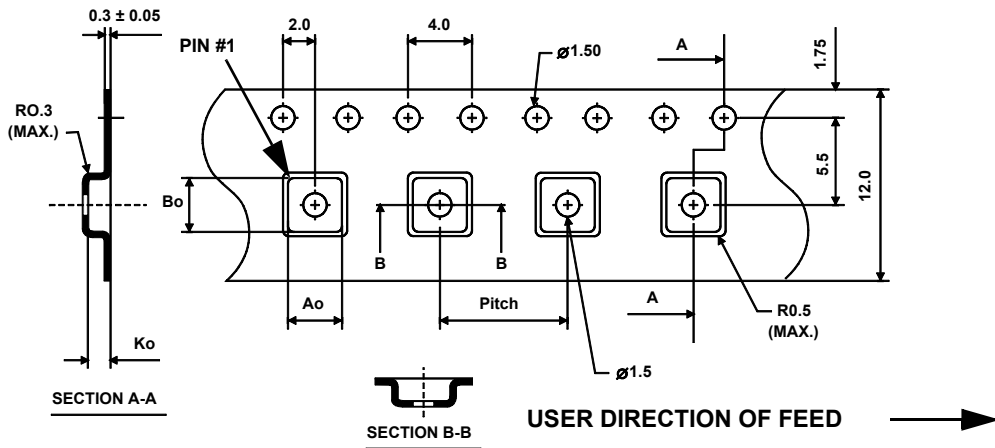
Tape and Reel Standard per ANSI/EIA-481

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



COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	4.25 mm
Bo	4.25 mm
Ko	1.30 mm
Pitch	8.0 mm
W	12.0 mm



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.

