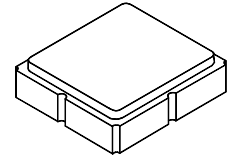


SF2364E

868.30 MHz



SM3030-8

- **Complies with Directive 2002/95/EC (RoHS)**
- **Moisture Sensitivity Level: 1**

Characteristics:

Balance-to-balanced operation

Maximum Rating

Rating	Value	Units
Input Power Level	+10	dBm
DC Voltage on any Non-ground Terminal	0	V
Operating Temperature Range	-45 to +95	°C
Storage Temperature Range	-45 to +125	°C
Maximum Soldering Profile, 5 cycles/ 10 seconds maximum	265	°C

Characteristic: Reference temperature 25 °C	Sym	Notes	Min	Typ	Max	Units
Center Frequency	F_C			868.30		MHz
Minimum Insertion Loss,	IL_{min}			2.9	4.2	dB
Passband (relative to IL_{min})						dB
868 to 868.78 MHz				1.0	3.0	
867.9 to 868.88 MHz				1.5	4.0	
Pass bandwidth (relative to IL_{min})	BW_3			1500		KHz
Attenuation, (relative to IL_{min}):						dB
10 to 700 MHz			50	55		
700 to 830 MHz			40	45		
830 to 850 MHz			35	40		
850 to 865.02 MHz			25	28		
871 to 874.5 MHz			15	20		
874.5 to 883 MHz			19	23		
883 to 900 MHz			30	35		
900 to 1000 MHz			40	45		
Impedance at FC	$Z_{IN}=R_{IN}/C_{IN}$		117Ω // 3.7 pF			
	$Z_{OUT}=R_{OUT}/C_{OUT}$		117Ω // 3.7 pF			

Case Style	SM3030-8 3.0 x 3.0 mm Nominal Footprint		
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator	5L, <u>YWWS</u>		
Standard Reel Quantity	Reel Size 7 inch	500 Pieces/Reel	
	Reel Size 13 inch	3000 Pieces/Reel	

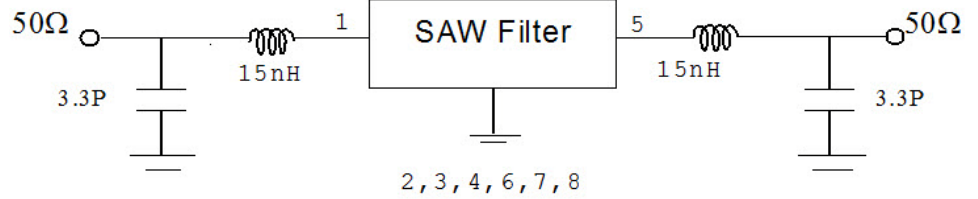
 **CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

NOTES:

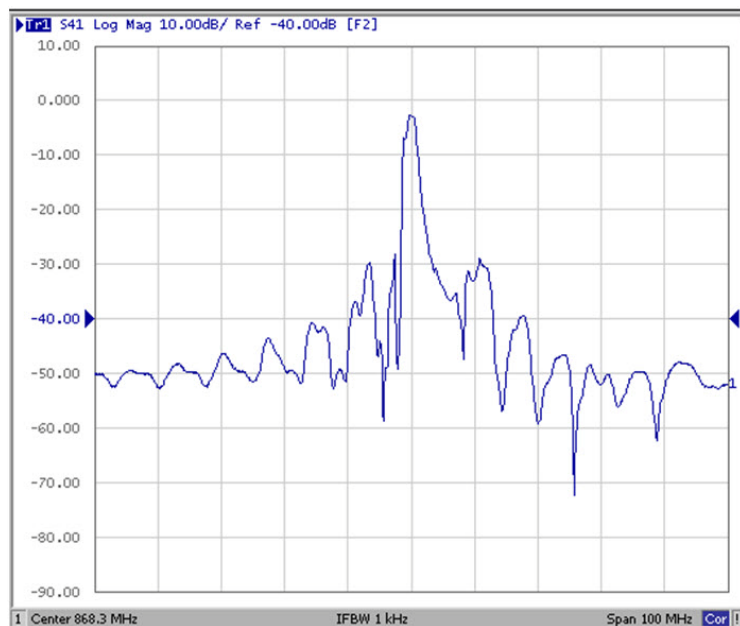
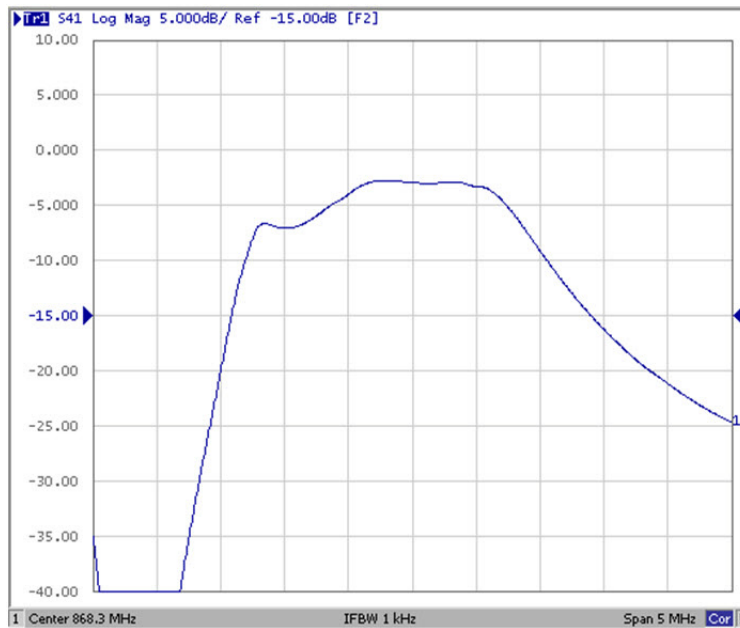
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Measurement Circuit

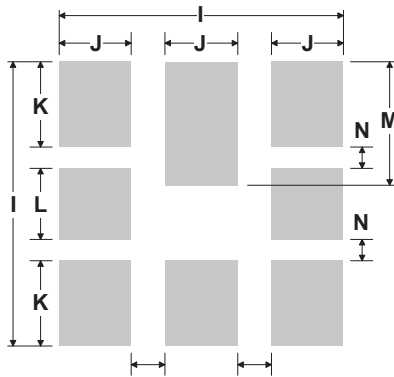
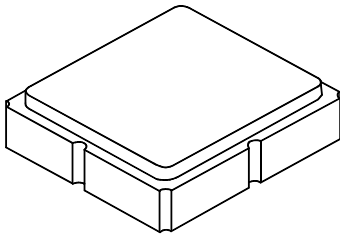
Pin Description	
1	Input or Input Ground
2	Input Ground or Input
5	Output or Output Ground
6	Output Ground or Output
3, 4, 7, 8	Ground



Frequency Characteristics



8-Terminal Ceramic Surface-Mount Case 3.0 X 3.0 mm Nominal Footprint



PCB Footprint Top View

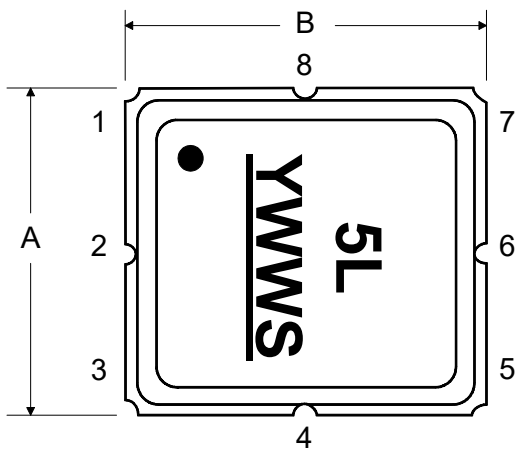
Case and PCB Footprint Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	-	3.0	-	0.113	0.118	0.123
B	-	3.0	-	0.113	0.118	0.123
C	-	-	-	0.045	0.050	0.055
D	0.90	1.00	1.10	0.031	0.036	0.041
E	-	0.75	-	0.024	0.029	0.034
F	-	0.60	-	0.018	0.024	0.029
G	-	0.60	-	0.018	0.024	0.029
H	-	1.20	-	0.042	0.047	0.052
I	-	3.19	-	-	0.126	-
J	-	0.81	-	-	0.032	-
K	-	0.96	-	-	0.038	-
L	-	0.81	-	-	0.032	-
M	-	1.39	-	-	0.055	-
N	-	0.23	-	-	0.009	-
O	-	0.38	-	-	0.015	-

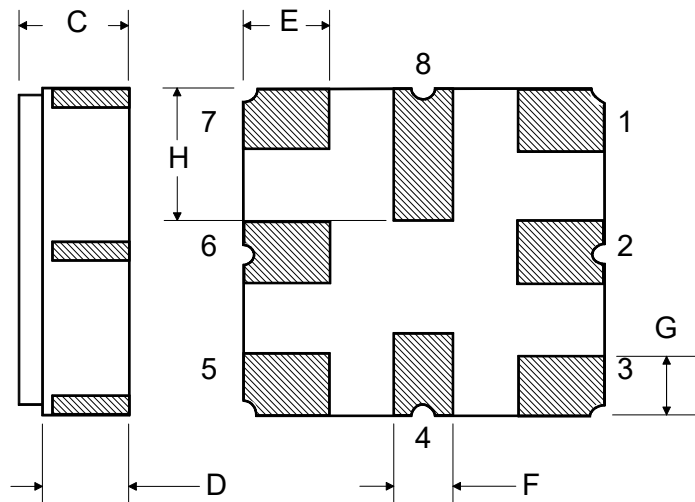
Case Materials

Materials	
Solder Pad Plating	0.3 to 1.0 μm Gold over 1.27 to 8.89 μm Nickel
Lid Plating	2.0 to 3.0 μm Nickel
Body	Al_2O_3 Ceramic

TOP VIEW

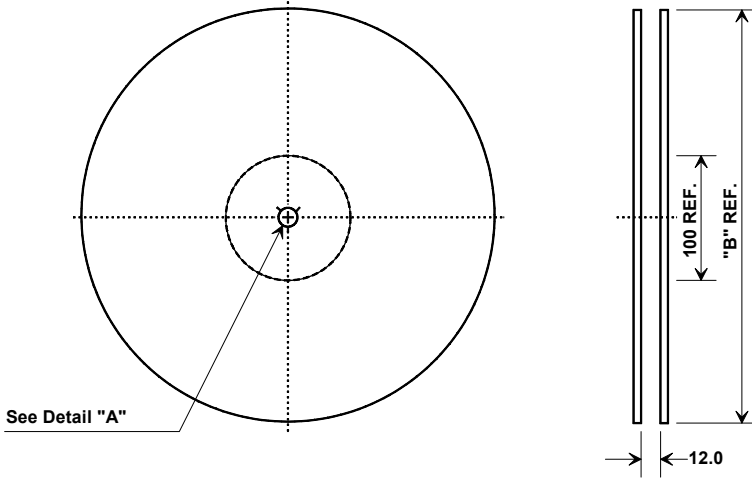


BOTTOM VIEW

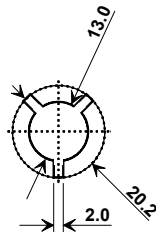


Tape and Reel Specifications

Tape and Reel Standard per ANSI/EIA-481

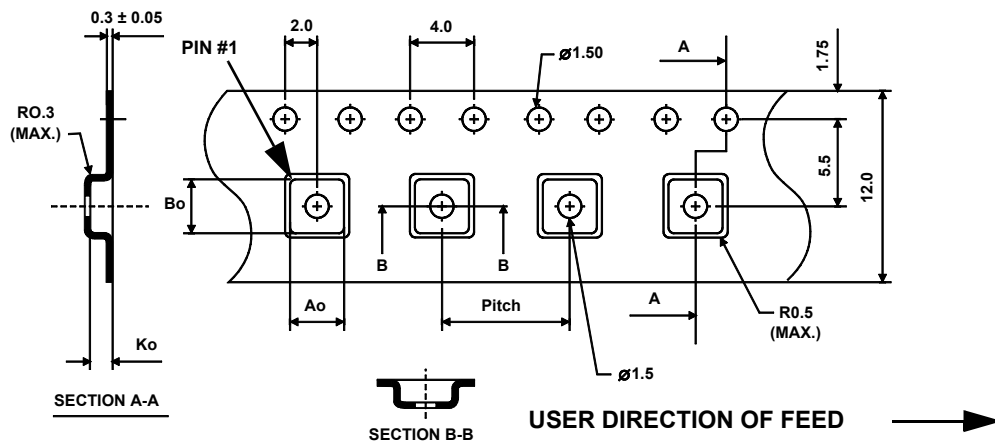


"B"		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	3000



COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	3.35 mm
Bo	3.35 mm
Ko	1.40 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.

