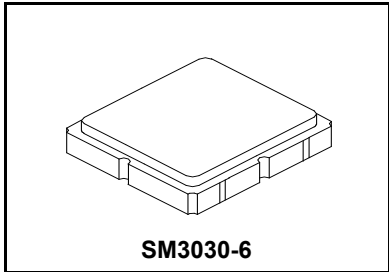


- Steep Roll-off Filter for 915 MHz ISM band
- Complies with Directive 2002/95/EC (RoHS)
- Moisture Sensitivity Level: 1

RoHS
Compliant

SF2049E-1

915.00 MHz
SAW Filter



Absolute Maximum Ratings

Rating	Value	Units
Input Power Level	+24	dBm
DC Voltage on any Non-ground Terminal	5	V
Operating Temperature Range	-40 to +85	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Maximum Soldering Profile, 5 Cycles/10 seconds Maximum	265	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_c			915.00		MHz
Insertion Loss, 902 to 928 MHz	IL			2.2	3.5	dB
Peak-to-Peak Amplitude Ripple, 902 to 928 MHz				0.6	2.0	dB
VSWR, 902 to 928 MHz	SWR			1.6:1	2.3:1	
Attenuation, Referenced to 0 dB:						dB
DC to 800 MHz			50	63.0		
800 to 880 MHz			40.0	48.0		
960 to 1080 MHz			32.0	39.0		
1080 to 1500 MHz			45.0	65.0		
1500 to 3000 MHz			22.0	28.0		
Source Impedance	Z_s			50		Ω
Load Impedance	Z_L			50		Ω
Case Style	SM3030-6 3.0 x 3.0 mm Nominal Footprint					
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator	917, YWWS					

Electrical Connections

Connection	Terminals
Input	2
Output	5
Case Ground	All others

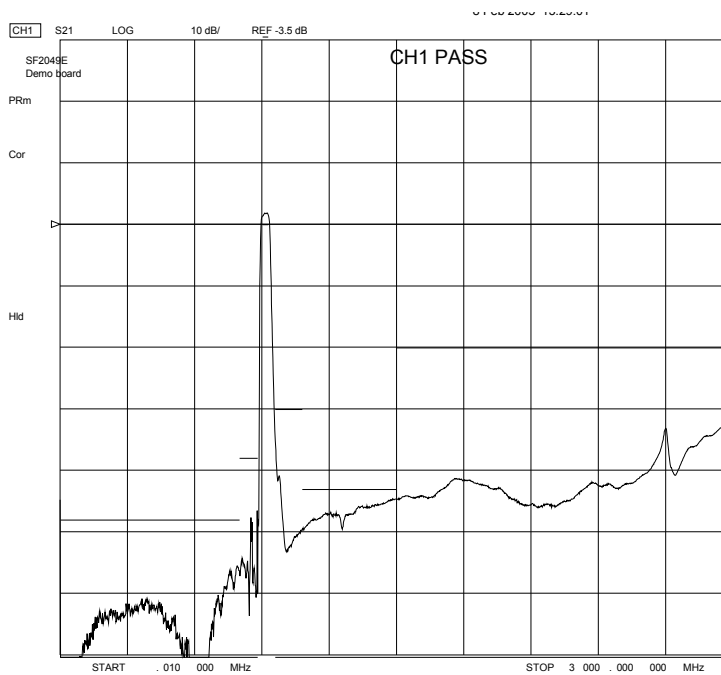
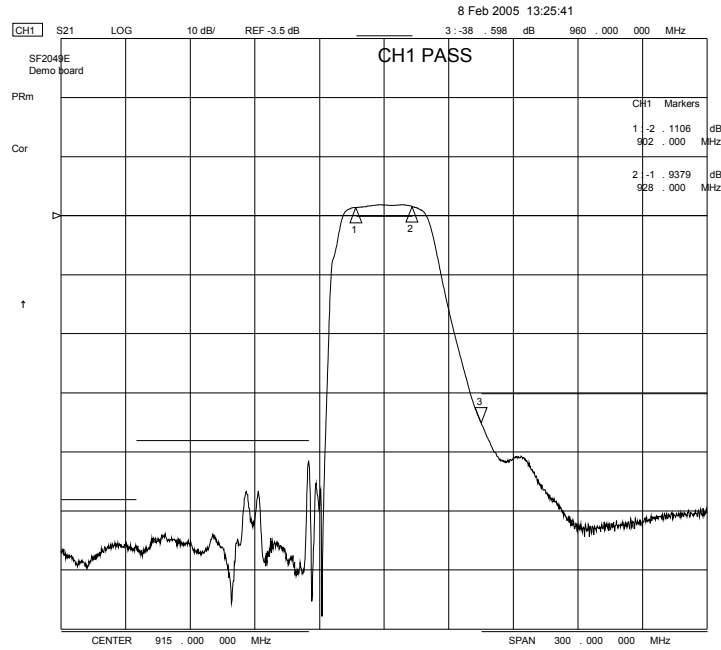


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

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.

HBM ESD Test Result		MM ESD Test Result	
Applied Voltage (V)	Failure Quantity (pcs)	Applied Voltage (V)	Failure Quantity (pcs)
25	0	25	0
50	0	50	0
100	0	100	0
150	0	150	0
200	0	200	0



SM3030-6 Case

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



PCB Footprint Top View

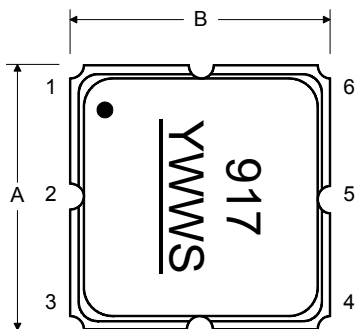
Case and PCB Footprint Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.87	3.00	3.13	0.113	0.118	0.123
B	2.87	3.00	3.13	0.113	0.118	0.123
C	1.12	1.25	1.38	0.044	0.049	0.054
D	0.77	0.90	1.03	0.030	0.035	0.040
E	2.67	2.80	2.93	0.105	0.110	0.115
F	1.47	1.60	1.73	0.058	0.063	0.068
G	0.72	0.85	0.98	0.028	0.033	0.038
H	1.37	1.50	1.63	0.054	0.059	0.064
I	0.47	0.60	0.73	0.019	0.024	0.029
J	1.17	1.30	1.43	0.046	0.051	0.056
K		3.20			0.126	
L		1.70			0.067	
M		1.05			0.041	
N		0.81			0.032	
O		0.38			0.015	

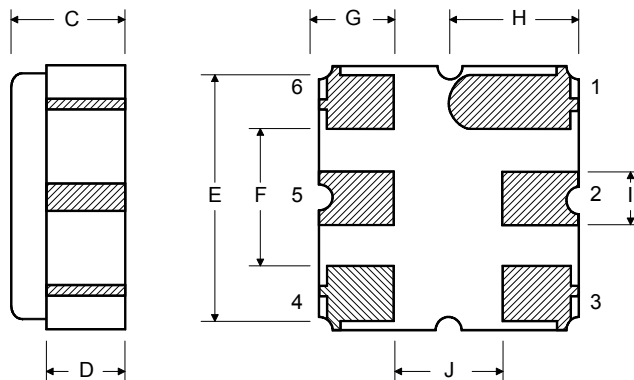
Case Materials

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

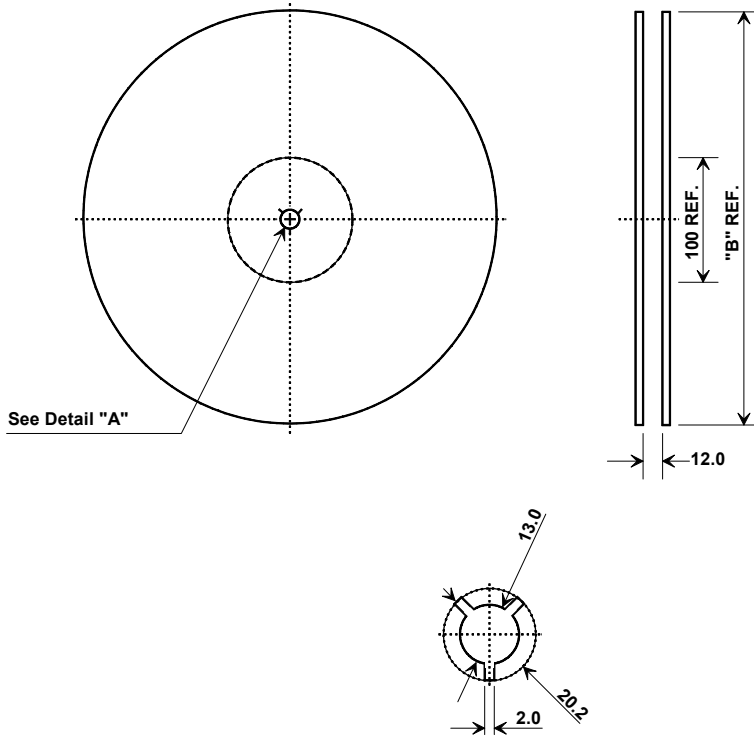


BOTTOM VIEW



Tape and Reel Specifications

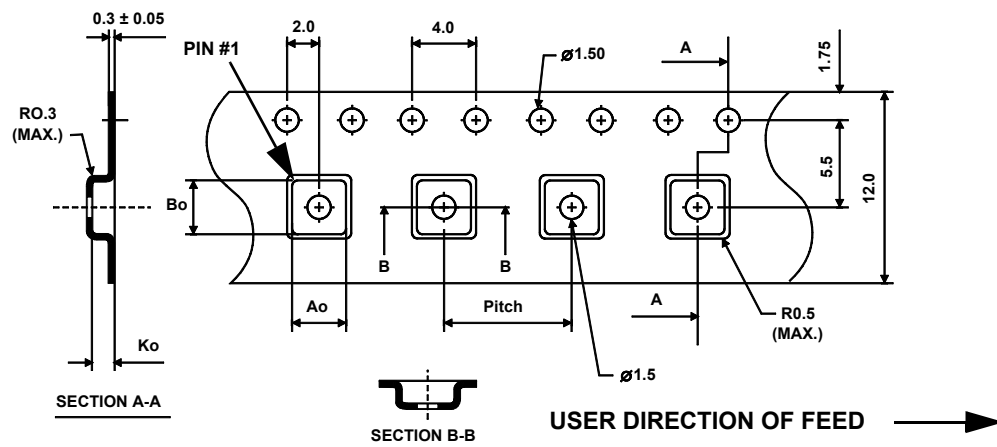
Tape and Reel Standard per ANSI/EIA-481



"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.

