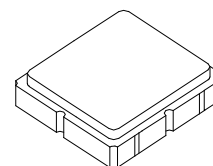


Preliminary



SF2137E

**869.00 MHz
SAW Filter**



SM3030-6

- **Steep Roll-off Filter for 869.00 MHz Unlicensed band**
- **Complies with Directive 2002/95/EC (RoHS)**
- **No Matching Required for Operation in 50W Environment**

Absolute Maximum Ratings

Rating	Value	Units
Input Power Level	17	dBm
DC Voltage	3	V
Operating Temperature Range	-40 to +85	°C
Storage Temperature Range	-40 to +85	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	F_C			869.00		MHz
Bandwidth, 1dB				11		MHz
Bandwidth, 3dB				17		MHz
Insertion Loss within 868 ~ 870 MHz	IL			2.8	4.0	dB
Amplitude Ripple (p-p) 868 ~ 870 MHz				0.2	1.5	
Absolute Attenuation		825~828 MHz	40	47		
		835~842 MHz	30	39		
		891~894 MHz	30	42		
		910~913 MHz	40	47		
Source Impedance	Z_S			50		Ω
Load Impedance	Z_L			50		Ω

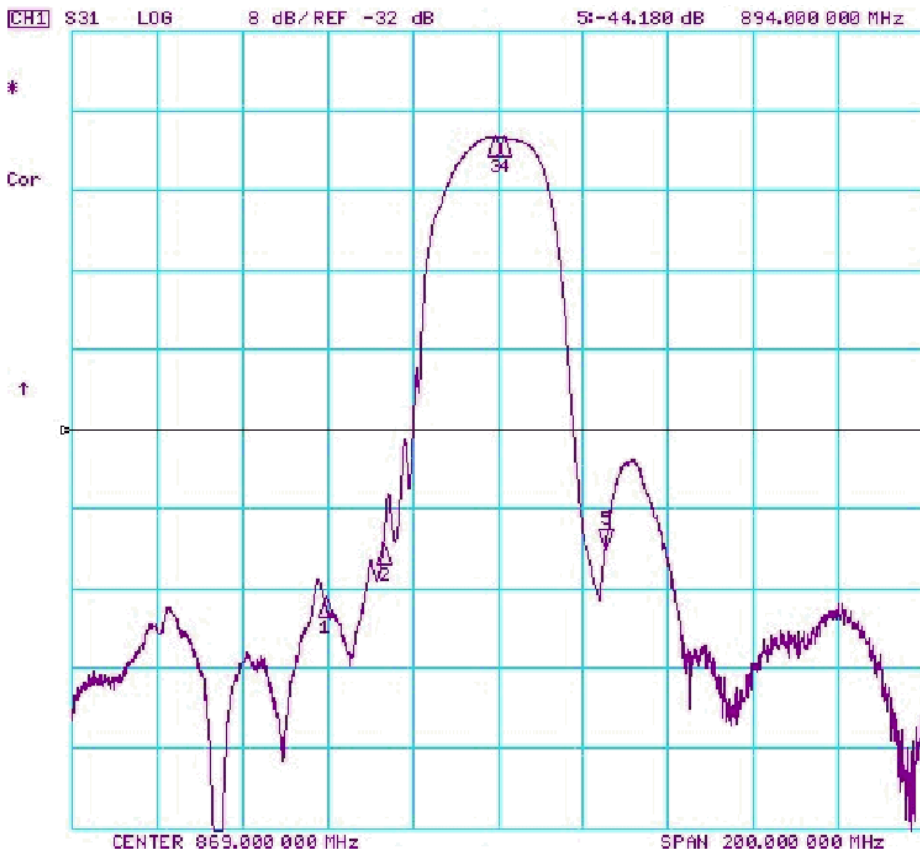
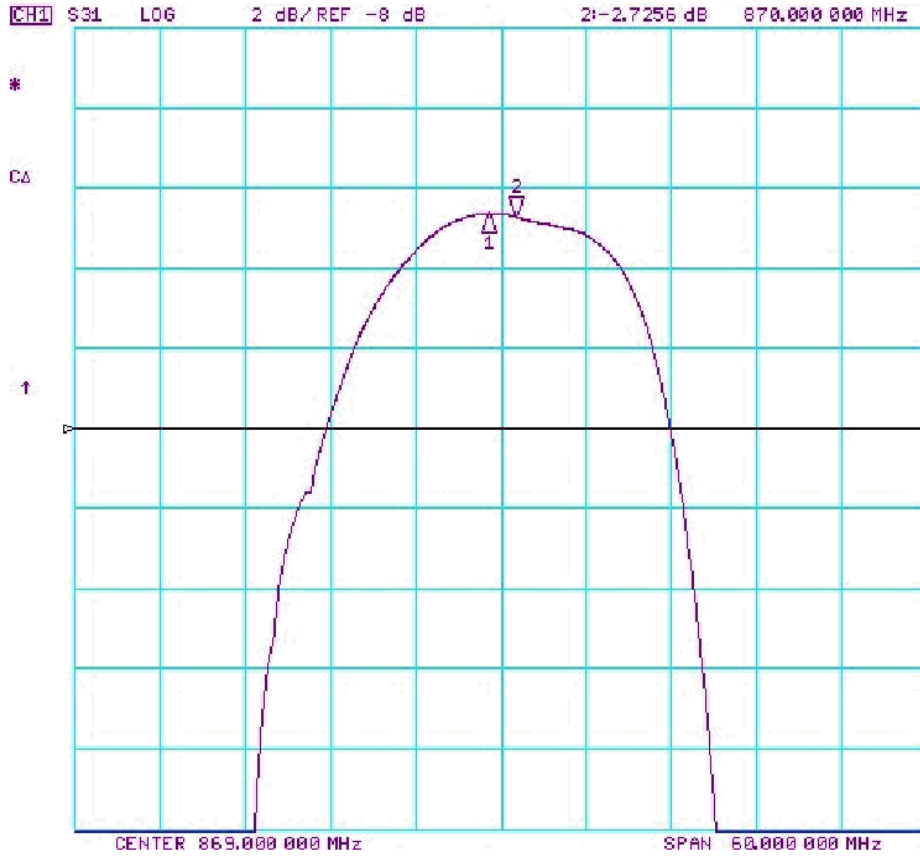
Case Style	SM3030-6 3.0 x 3.0 mm Nominal Footprint	
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator	711, YWWS	
Standard Reel Quantity	Reel Size 7 Inch	1000 Pieces/Reel
	Reel Size 13 Inch	3000 Pieces/Reel

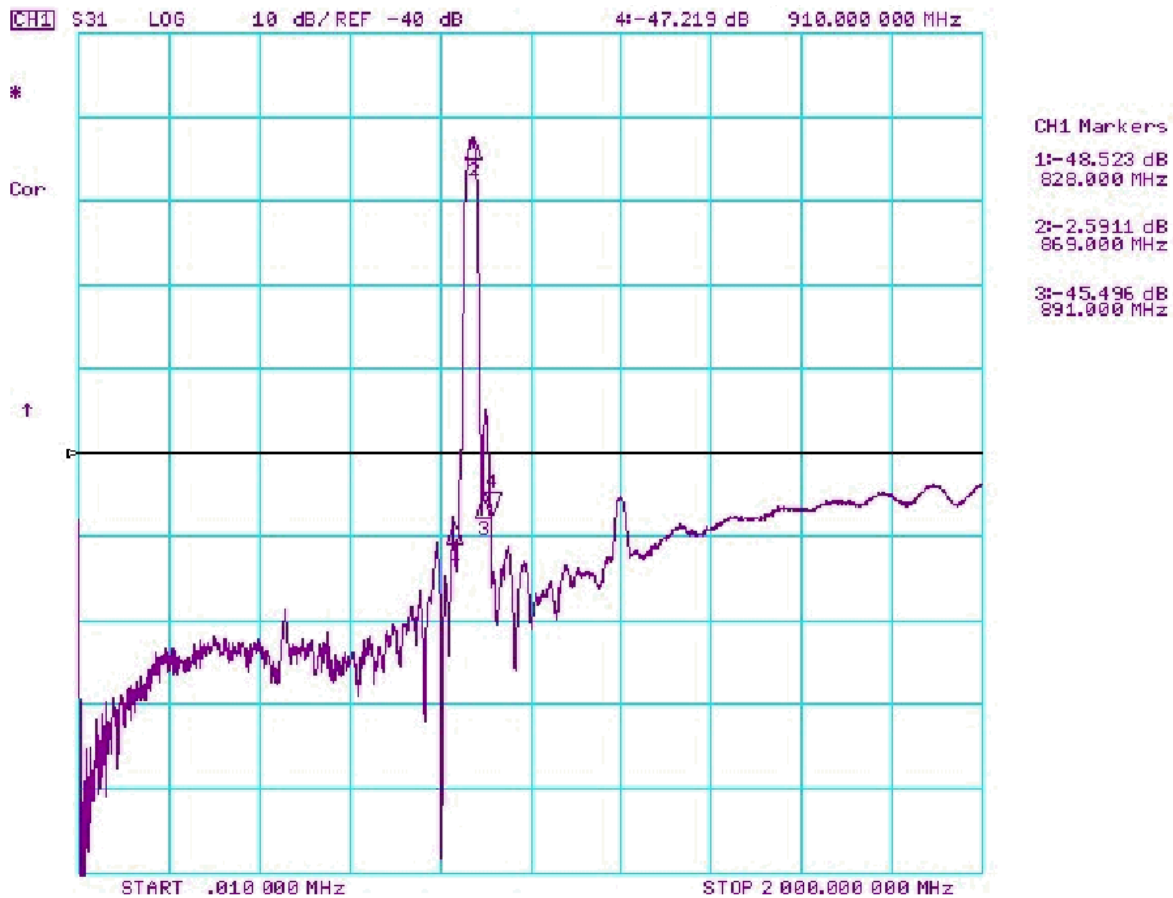
Electrical Connections

Connection	Terminals
Port 1	2
Port 2	5
Case Ground	All others

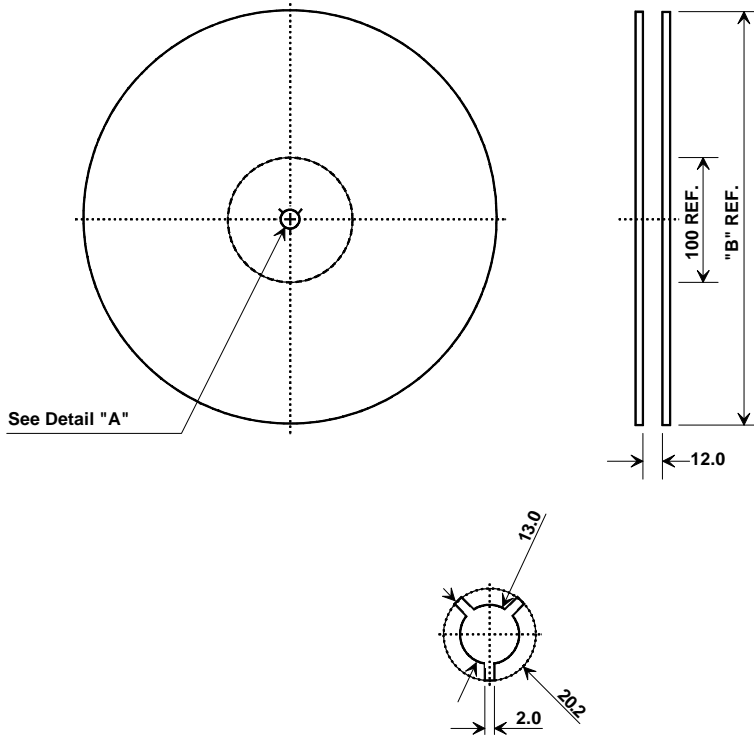
Notes:

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, f_c .
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. US and international patents may apply.
6. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.
7. ©Copyright 1999, RF Monolithics Inc.
8. Electrostatic Sensitive Device. Observe precautions for handling





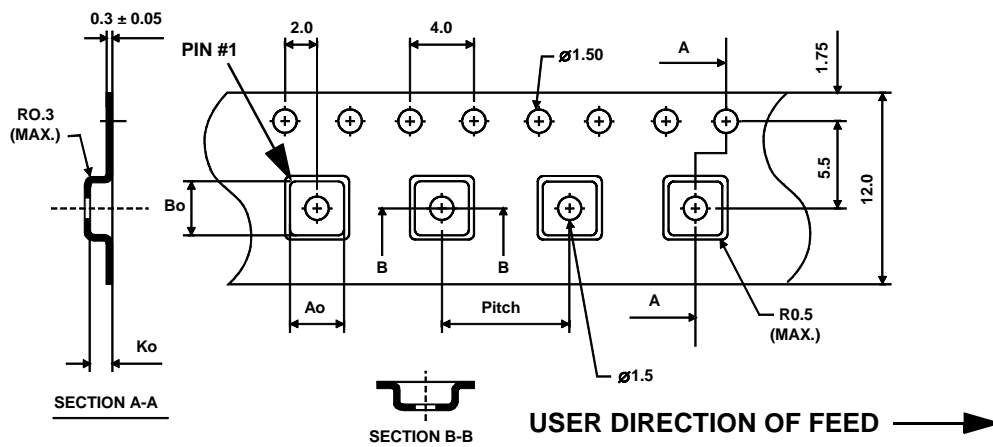
Tape and Reel Specifications



"B "		Quantity Per Reel
Inches	millimeters	
7	178	1000
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

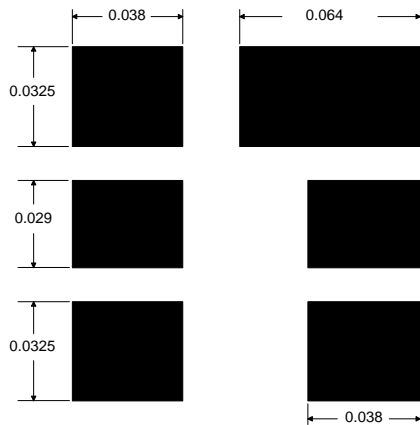


SM3030-6 Case

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

Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.87	3.0	3.13	0.113	0.118	0.123
B	2.87	3.0	3.13	0.113	0.118	0.123
C	1.12	1.25	1.38	0.044	0.049	0.054
D	0.77	0.9	1.03	0.030	0.035	0.040
E	2.67	2.80	2.93	0.105	0.110	0.115
F	1.47	1.6	1.73	0.058	0.063	0.068
G	0.72	0.85	0.98	0.028	0.033	0.038
H	1.37	1.5	1.63	0.054	0.059	0.064
I	0.47	0.6	0.73	0.019	0.024	0.029
J	1.17	1.3	1.43	0.046	0.051	0.056



Foot Print Dimensions in Nominal Inches

Electrical Connections

Connection		Terminals
Port 1	Single Ended Input	2
Port 2	Single Ended Output	5
	Ground	All others
Single Ended Operation Only		
Dot indicates Pin 1		

TOP VIEW

BOTTOM VIEW

