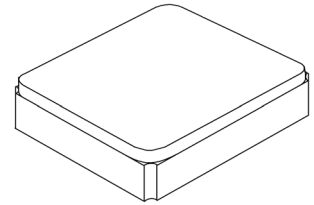


SF2314H

866.5 MHz SAW Filter



SM2016-4

- Low-loss 866.5 MHz SAW Filter
- Designed for 50 ohm Source/Load
- Complies with Directive 2002/95/EC (RoHS)
- Moisture Sensitivity Level: 1

Absolute Maximum Ratings

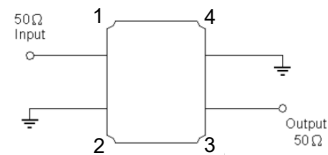
Rating	Value	Units
Input Power Level	+18	dBm
DC Voltage on any Non-ground Terminal	3	V
Operable Temperature Range	-45 to +125	°C
Specification Temperature Range	-40 to +85	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Moisture Sensitivity Level	1	MSL
Maximum Soldering Profile, 5 cycles/10 seconds maximum	260	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			866.5		MHz
Insertion Loss, 863 to 870 MHz	IL			2.2	3.8	dB
Amplitude Ripple, 863 to 870 MHz				0.2	1.6	dB _{p-p}
VSWR, 863 to 870 MHz				1.5	2.5	
Attenuation, Referenced to 0 dB:						dB
10 to 830 MHz			45	56		
830 to 850 MHz			14	45		
885 to 905 MHz			14	27		
905 to 950 MHz			34	40		
950 to 1500 MHz			40	55		
1500 to 3000 MHz			25	32		
Source Impedance	Z_S			50		Ω
Load Impedance	Z_L			50		Ω
Case Style	SM2016-4 2.0 x 1.6 mm Nominal Footprint					
Lid Symbolization (Y = year, W = week) dot = pin 1 indicator	B9, YW					
Standard Reel Quantity	Reel Size 7 inch					2000 Pieces/Reel
	Reel Size 13 inch					10,000 Pieces/Reel

Electrical Connections

Connection	Terminals
Input	1
Output	3
Ground	2, 4

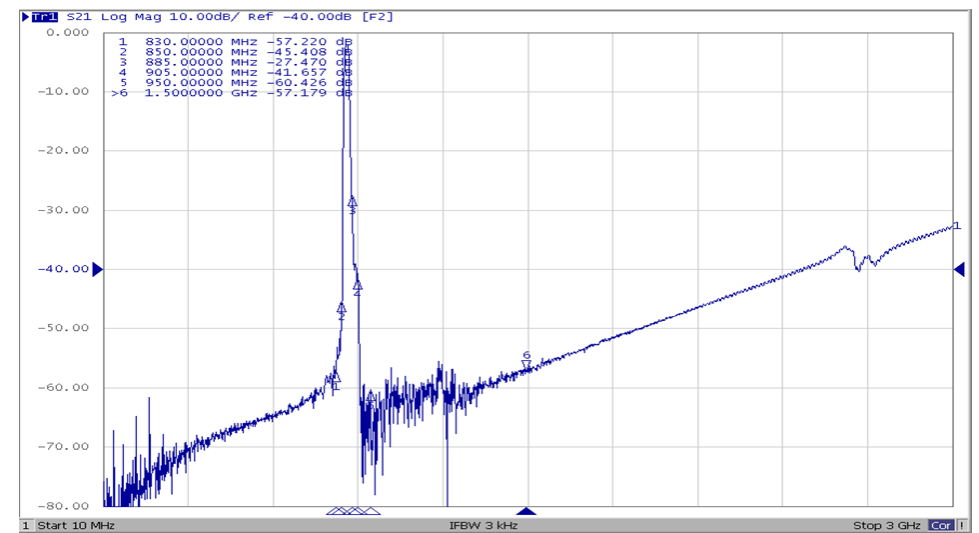
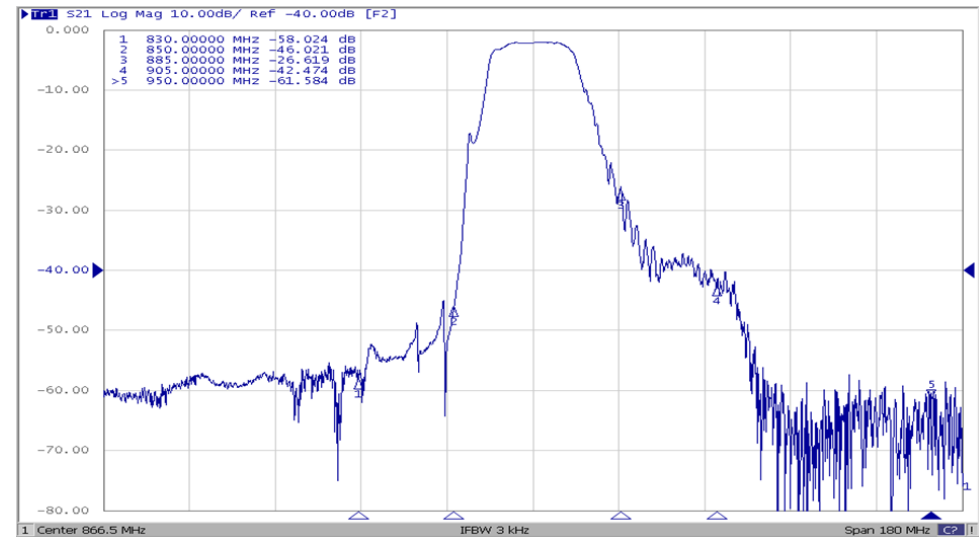
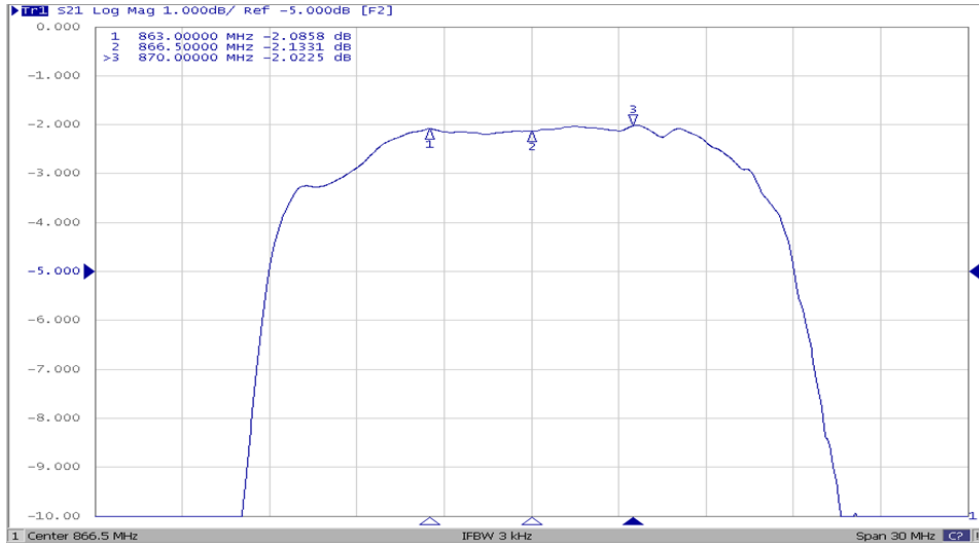


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

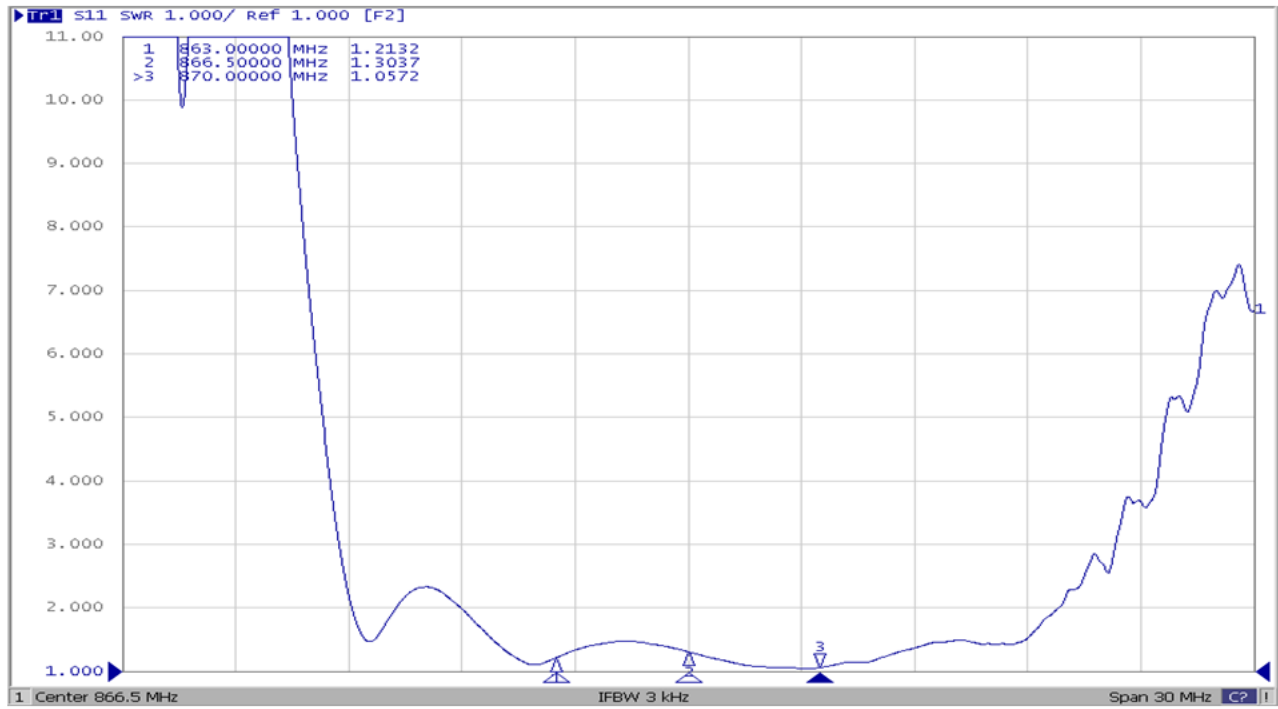
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Frequency Characteristics

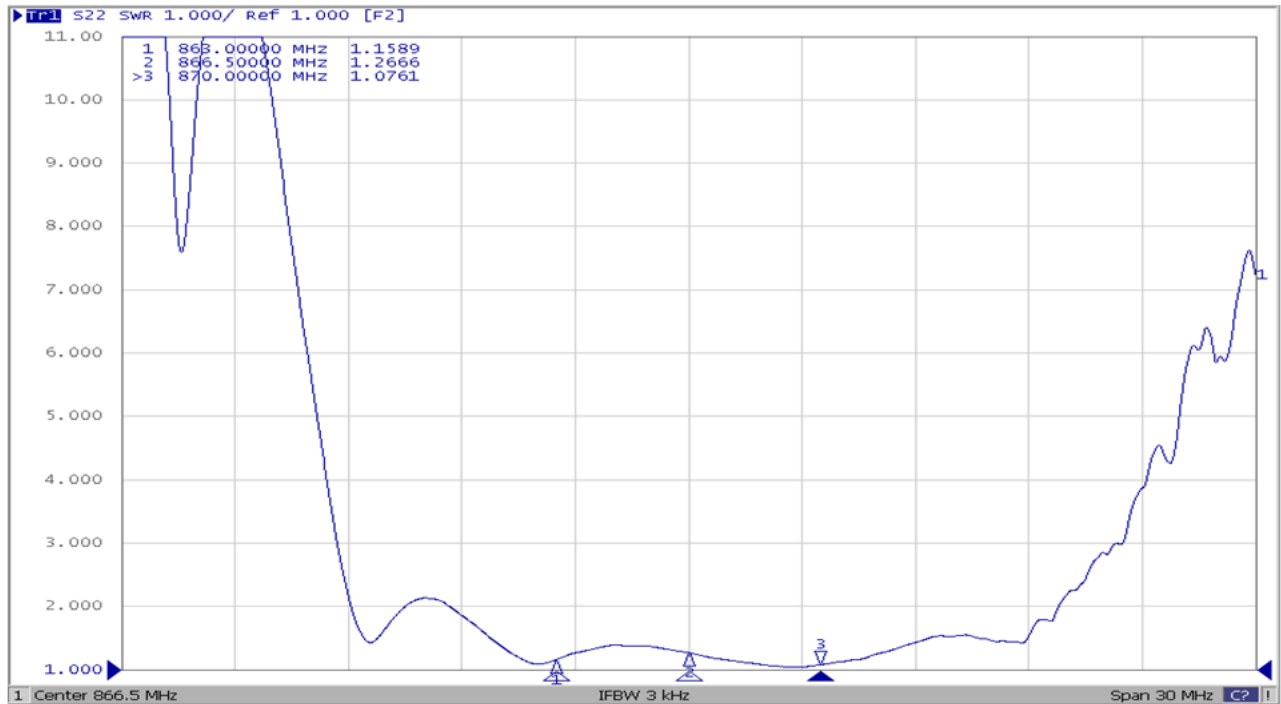


Frequency Characteristics

Reflection Functions - S11

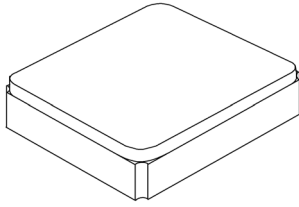


Reflection Functions - S22



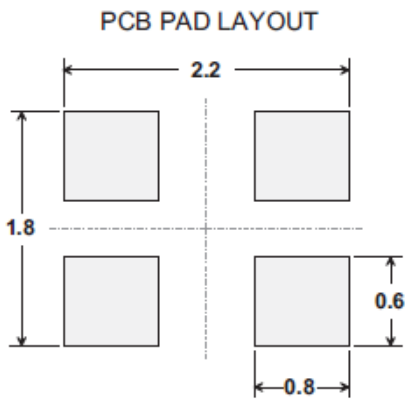
SM2016-4 Case

4-Terminal Ceramic Surface-Mount Case 2.0 X 1.6 mm Nominal Footprint



Electrical Connections

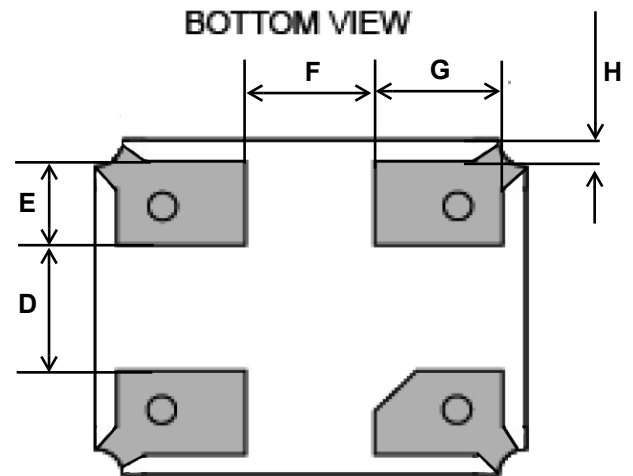
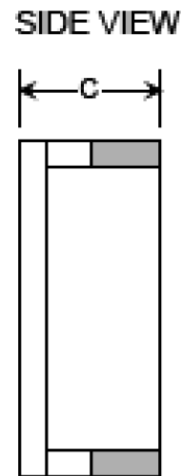
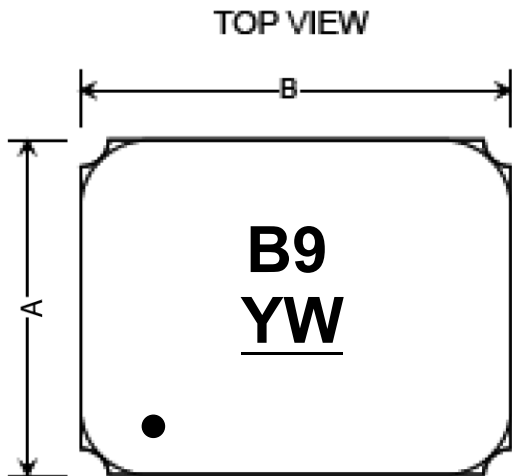
Connection	Terminals
Input	1
Output	3
Ground	2, 4



Dimensions in mm
All pads have the same dimensions

PCB Footprint Top View

Dimensions	Millimeters			Inches		
	Min	Nom	Max	Min	Nom	Max
A	1.58	1.65	1.72	0.062	0.064	0.067
B	1.98	2.05	2.12	0.077	0.080	0.083
C	-	-	0.9	-	0.035	0.035
D	-	0.60	-	-	0.023	-
E	-	0.425	-	-	0.016	-
F	-	0.60	-	-	0.023	-
G	-	0.625	-	-	0.024	-
H	-	0.10	-	-	0.003	-

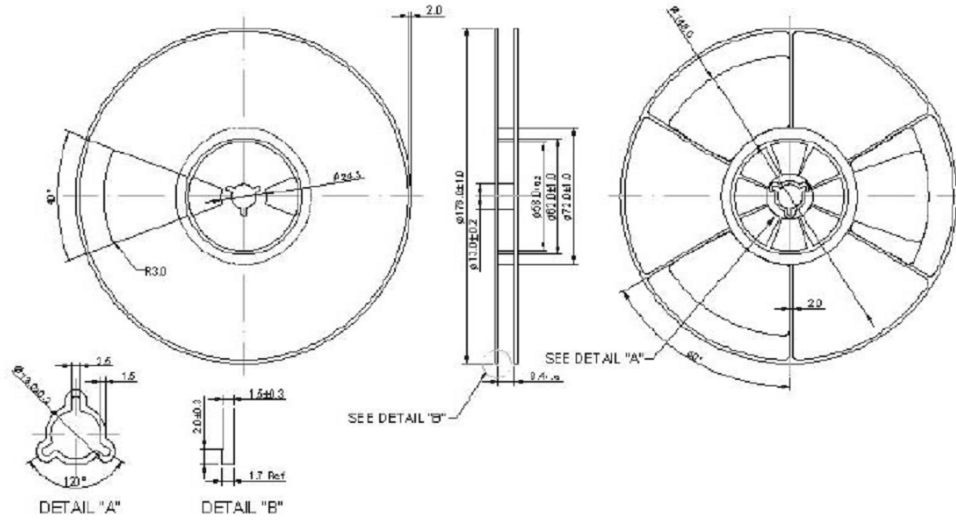


Tape and Reel Specifications

PACKING:

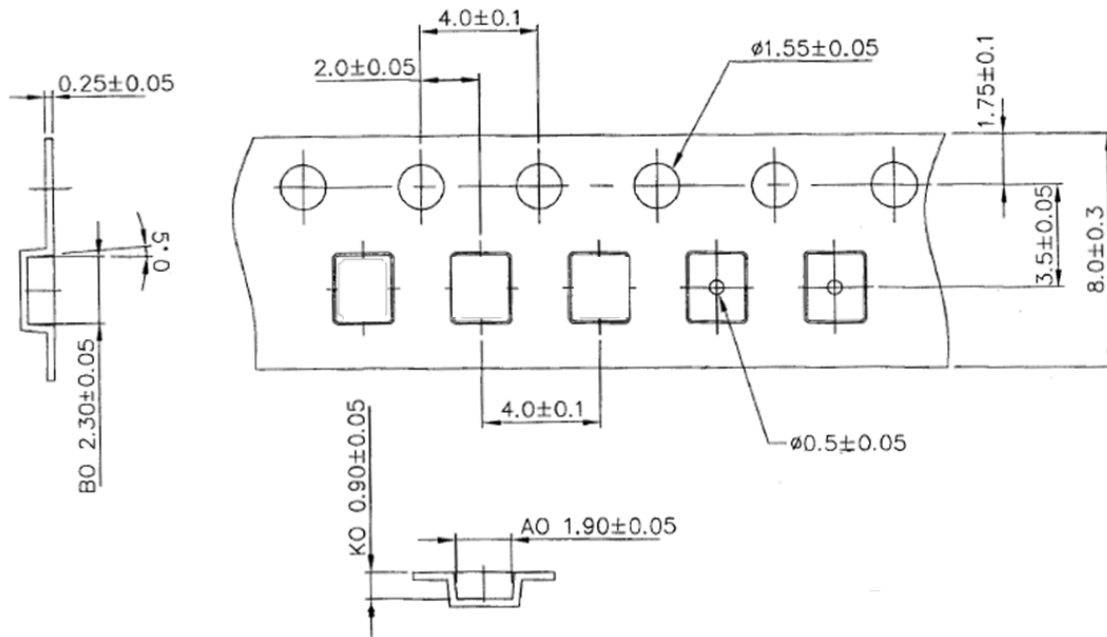
REEL DIMENSION

(Reel Count : 7"=2000 typ. ; 13"=10000 typ.)



COMPONENT ORIENTATION and DIMENSIONS

TAPE DIMENSION



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.

