



AEC-Q200
This component was always
RoHS compliant from the first
date of manufacture.

- 895 MHz Low-loss SAW Filter
- Surface Mount 3.0 x 3.0 mm Package
- Complies with Directive 2002/95/EC (RoHS)

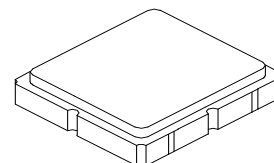


Absolute Maximum Ratings

Rating	Value	Units
Input Power Level	15	dBm
DC Voltage on any Non-ground Terminal	5	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
Solder Reflow Temperature, 10 seconds, 5 cycles maximum	260	°C

SF2287E

895 MHz SAW Filter



SM3030-6

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			895		MHz
Minimum Insertion Loss, 894 to 896 MHz	IL_{MIN}			2.6	3.2	dB
Amplitude Ripple, 894 to 896 MHz				0.3	1.2	dB _{P-P}
Input/Output Return Loss, 894 to 896 MHz			9	12		dB
Attenuation, Referenced to 0 dB						
10 to 851 MHz			40	56		dB
1030 to 1100 MHz			40	54		
1100 to 2600 MHz			25	33		
Source Impedance	Z_S			50		Ω
Load Impedance	Z_L			50		
Temperature Coefficient of Frequency	TCf			-36		ppm/°C
Case Style	SM3030-6 3.0 x 3.0 mm Nominal Footprint					
Lid Symbolization, Y=year, WW=week, S=shift, dot=pin 1 indicator	A34, YWWWS					
Standard Reel Quantity	Reel Size 7 Inch	500 Pieces/Reel				
	Reel Size 13 Inch	3000 Pieces/Reel				

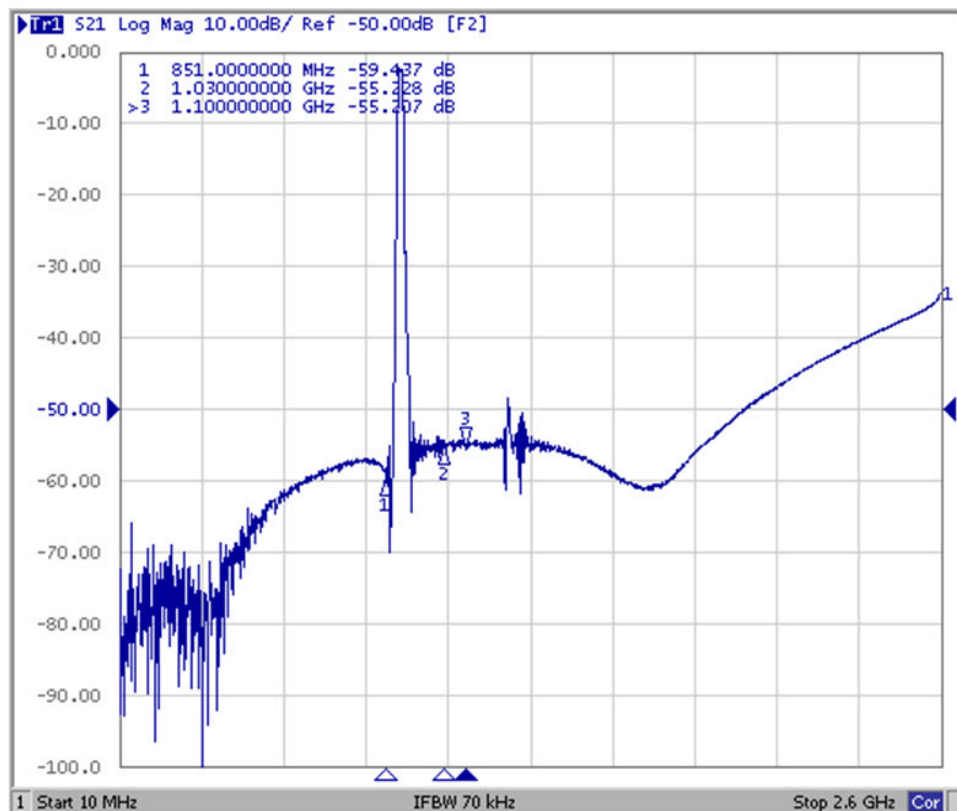
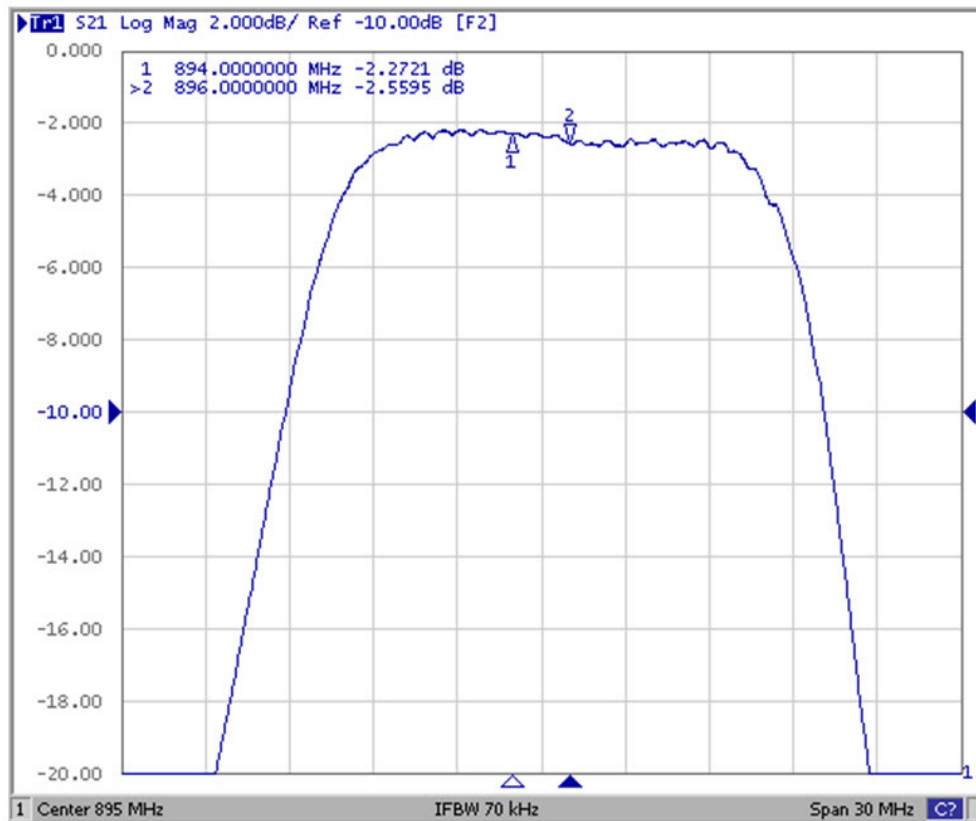


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

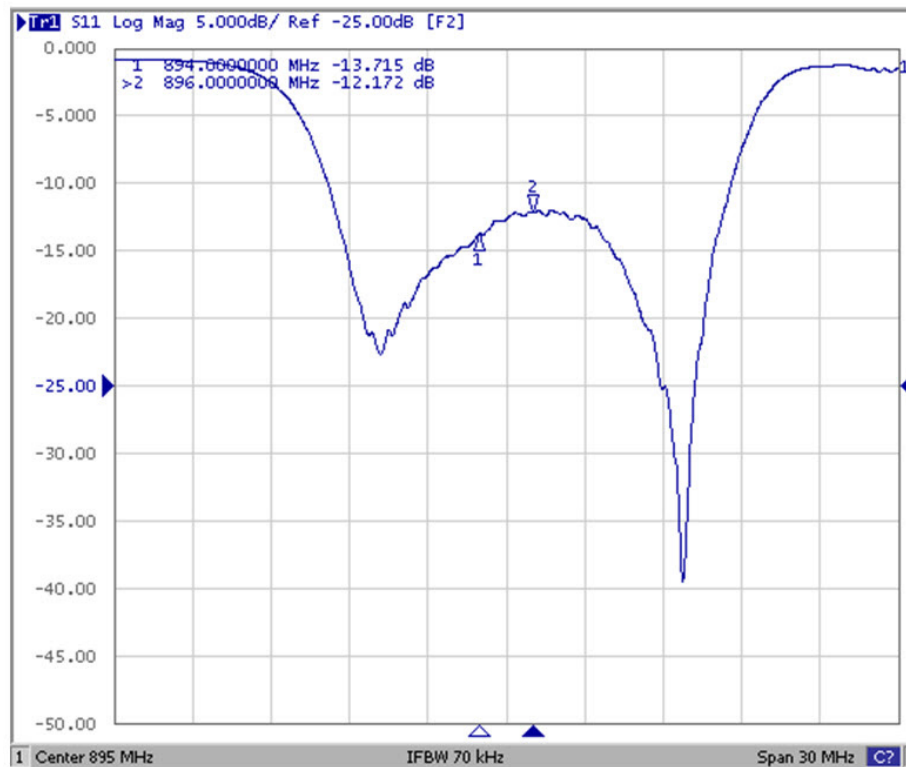
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.

Frequency Characteristics

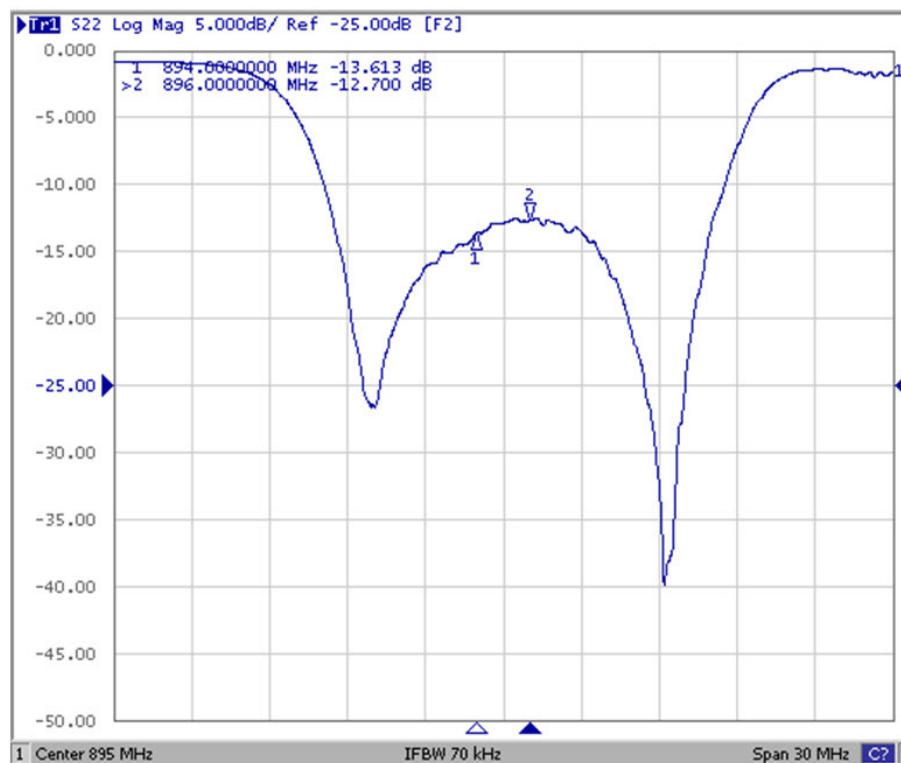


Reflection Functions

S11

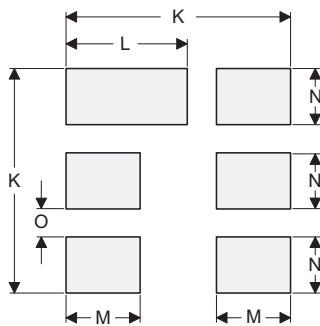
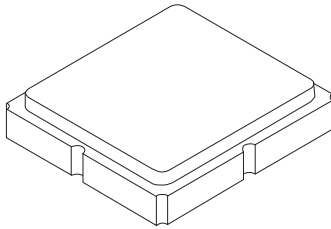


S22



SM3030-6 Case

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



**PCB Land Pattern
Top View**

Case and PCB Footprint Dimensions

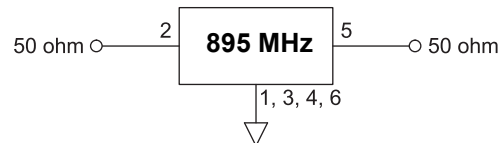
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	-	3.00	-	-	0.118	-
B	-	3.00	-	-	0.118	-
C	-	-	1.40	-	-	0.055
D	-	0.90	-	-	0.035	-
E	-	2.80	-	-	0.110	-
F	-	1.60	-	-	0.063	-
G	-	0.85	-	-	0.033	-
H	-	1.50	-	-	0.059	-
I	-	0.60	-	-	0.024	-
J	-	1.30	-	-	0.051	-
K	-	3.20	-	-	0.126	-
L	-	1.70	-	-	0.067	-
M	-	1.05	-	-	0.041	-
N	-	0.81	-	-	0.032	-
O	-	0.38	-	-	0.015	-

Case Materials

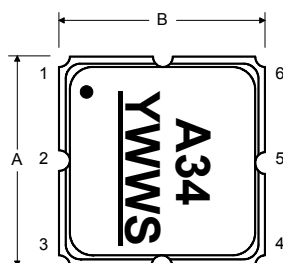
Materials	
Solder Pad Plating	0.3 to 1.0 μ m Gold over 1.27 to 8.89 μ m Nickel
Lid Plating	2.0 to 3.0 μ m Nickel
Body	Al ₂ O ₃ Ceramic
Pb Free	

Electrical Connections

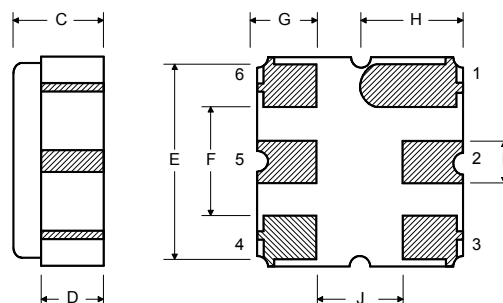
Connection	Terminals
Input	2
Output	5
Ground	All Others



TOP VIEW



BOTTOM VIEW



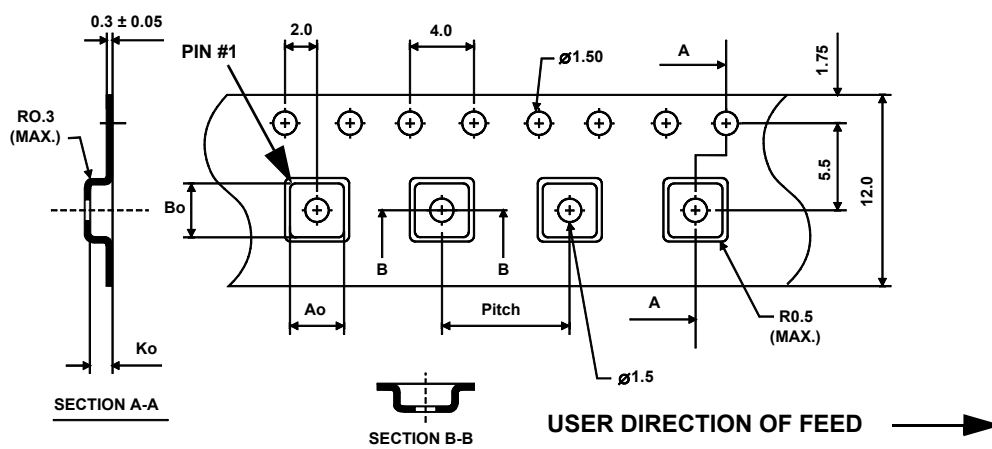
Tape and Reel Standard per ANSI/EIA-481

The drawing illustrates the ANSI/EIA-481 tape and reel standard. It includes three views: a top view, a side view, and a detail view of the central hole.

- Top View:** Shows a large outer circle and a smaller inner circle. A central hole is indicated by a crosshair. A dimension line points to the central hole with the text "See Detail 'A'".
- Side View:** Shows the profile of the tape and reel. The width is dimensioned as 12.0. The height is dimensioned as 100 REF. and "B" REF.
- Detail View:** A cross-section of the central hole. It shows a circular hole with a diameter of 13.0. The hole is surrounded by a ring with a thickness of 2.0. The outer diameter of the ring is 20.2.

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

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.



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