

- **Low-loss RF SAW Filter**
- **3 x 3 mm Surface-mount Package**

Absolute Maximum Ratings

Rating	Value	Units
Input Power Level	+13	dBm
DC Voltage on any Non-ground Terminal	±0	V
Operating Temperature Range	-40 to +105	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Source Impedance	$Z_S=50$	Ω
Load Impedance	$Z_L=50$	Ω

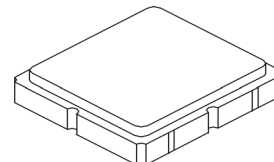
Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			434.42		MHz
Minimum Insertion Loss, α min	IL					dB
Incl. Loss in Matching Elements 433.79 to 435.05 MHz				2.2	2.9	
Excl. Loss In Matching Elements 433.79 to 435.05 MHz				1.4	2.1	
Pass Band (Relative to α min) 433.79 to 435.05 MHz				1.1	2.5	
433.72 to 435.12 MHz				1.3	3.0	
Relative Attenuation (Relative to α min)						dB
10 to 350 MHz			50	55		
350 to 414 MHz			30	35		
414 to 425 MHz			30	35		
425 to 433.02 MHz			13	17		
436.42 to 437.3 MHz			13	17		
437.3 to 438 MHz			22	27		
438 to 446 MHz			25	30		
446 to 455 MHz			25	30		
455 to 480 MHz			28	33		
480 to 800 MHz			40	45		
800 to 1700 MHz			52	57		
1700 to 2500 MHz			42	47		
Input: $Z_{IN}=Ls1/Cp1$				75/7.5		nH/pF
Output: $Z_{OUT}=Ls2/Cp2$				75/7.5		

Case Style	SM3030-6 3.0 x 3.0 mm Nominal Footprint	
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator	A85, YWWS	
Standard Reel Quantity	Reel Size 7 Inch	500 Pieces/Reel
	Reel Size 13 Inch	3000 Pieces/Reel

RF3625E

**434.42 MHz
SAW Filter**



SM3030-6



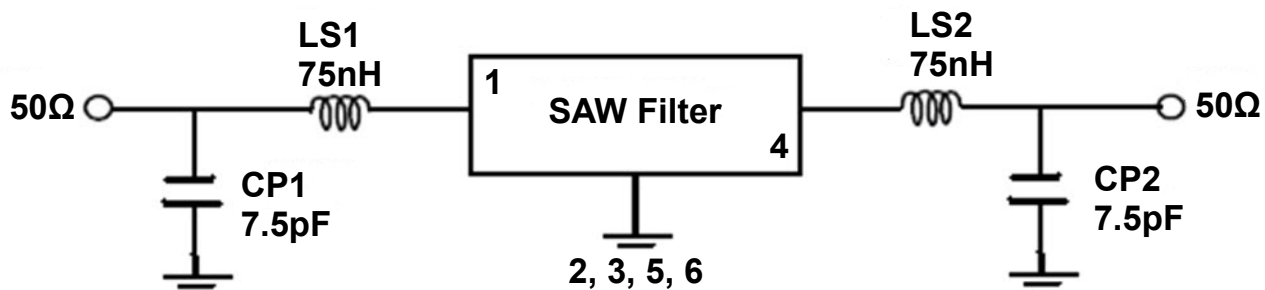
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

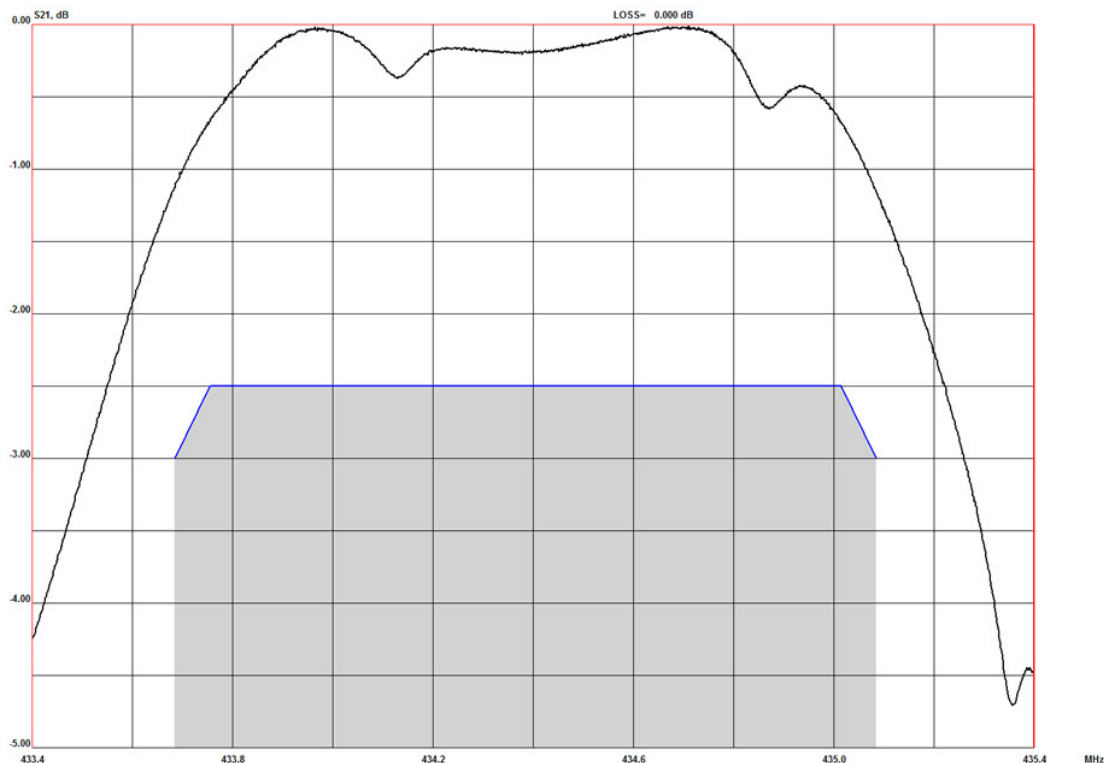
1. Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50 Ω and measured with 50 Ω network analyzer.
2. Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, fc.
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. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.

Electrical Connections

Connection	Terminals
Input or Input Ground	1
Output or Output Ground	4
Ground	2, 3, 5, 6

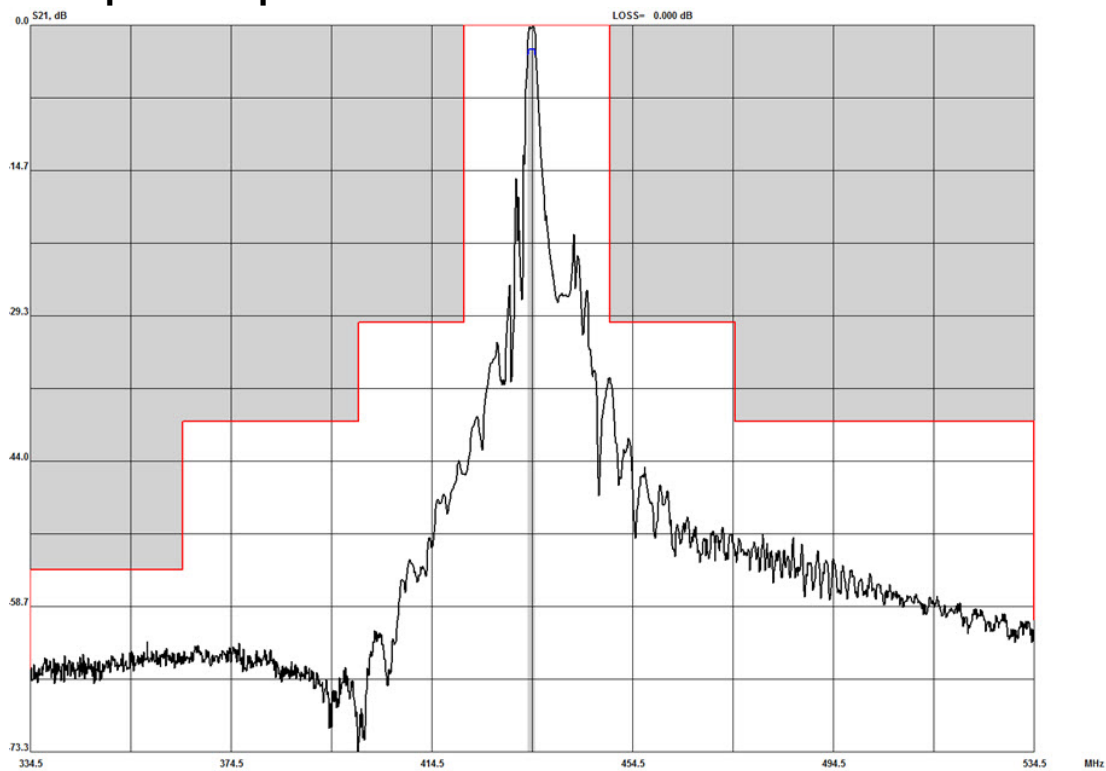


RF3625E Frequency Characteristics
S21 Response - span: 2 MHz

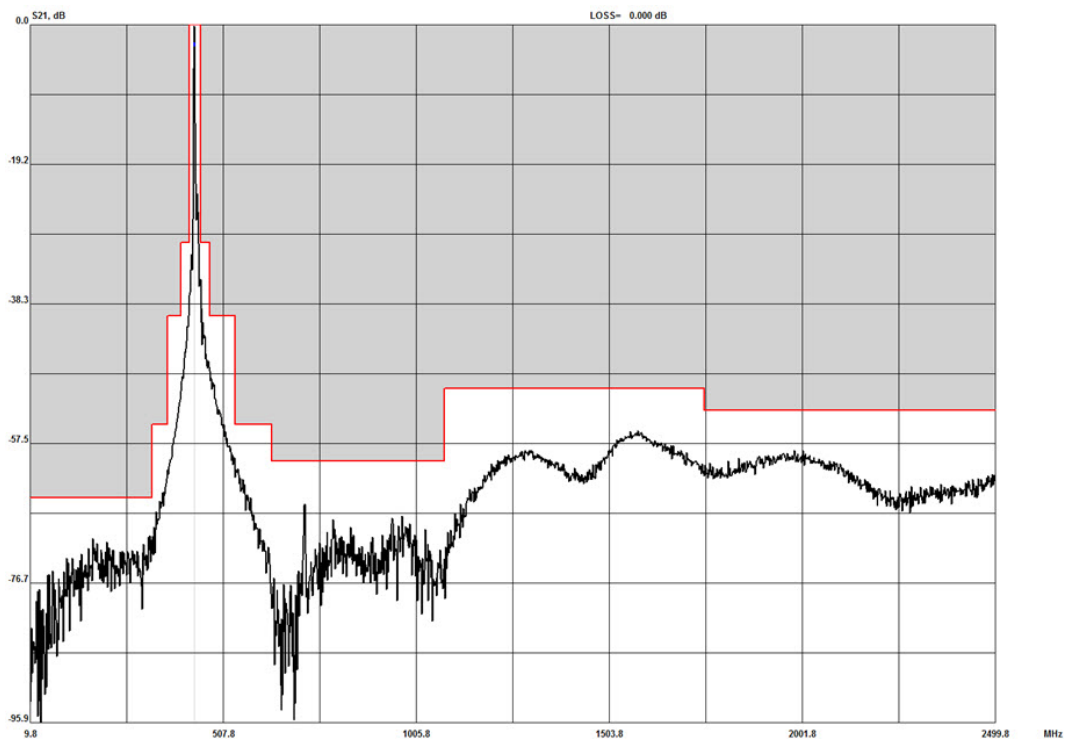


RF3625E Frequency Characteristics (continued)

S21 Response: span 200 MHz

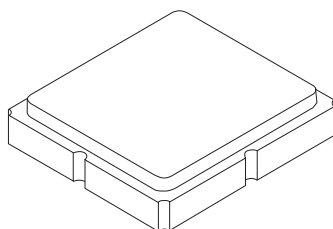


S21 Response: span 10 MHz to 2.5 GHz



SM3030-6 Case

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

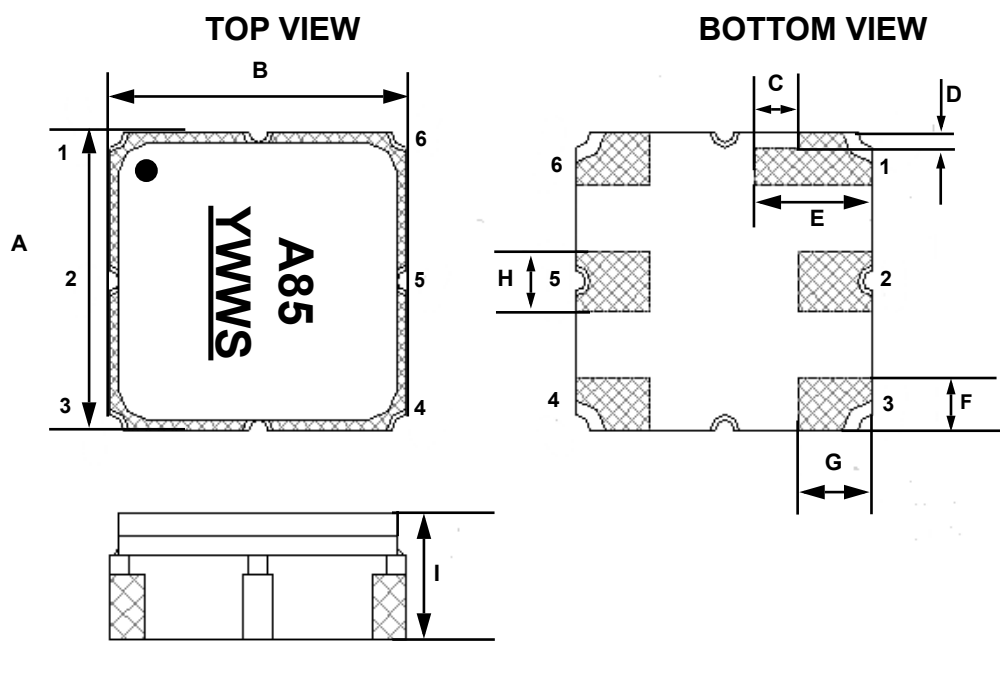


Case Dimensions

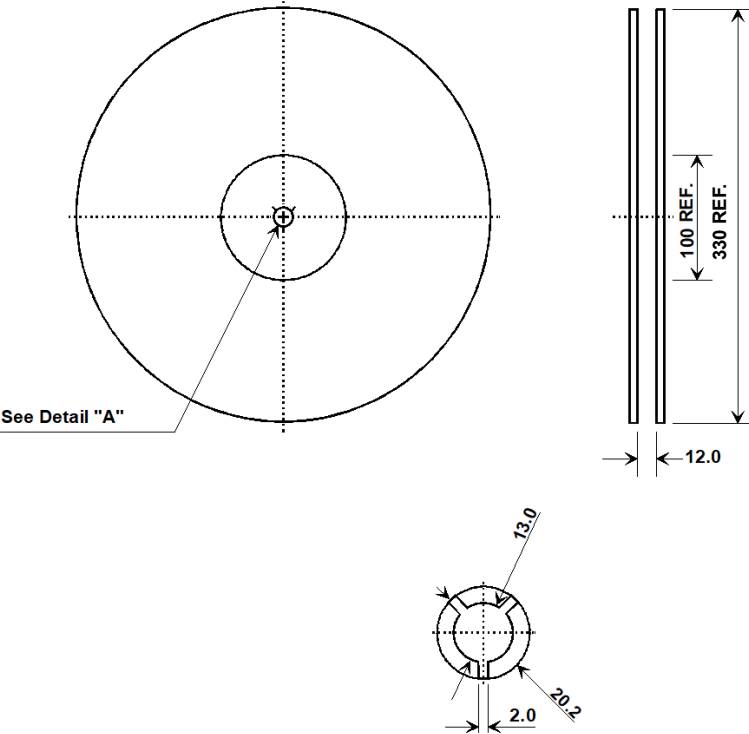
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.85	3.00	3.15	0.112	0.118	0.124
B	2.85	3.00	3.15	0.112	0.118	0.124
C	-	0.45	-	-	0.177	-
D	-	0.15	-	-	0.005	-
E	1.05	1.20	1.35	0.041	0.047	0.053
F	0.38	0.53	0.68	0.014	0.020	0.026
G	0.60	0.75	0.90	0.023	0.029	0.035
H	0.55	0.60	0.65	0.021	0.023	0.025
I	-	-	1.40	-	-	0.055

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	



Tape and Reel Specifications



COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	4.25 mm
Bo	4.25 mm
Ko	1.30 mm
Pitch	8.0 mm
W	12.0 mm

