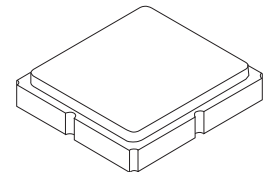


RF3626E

315 MHz SAW Filter



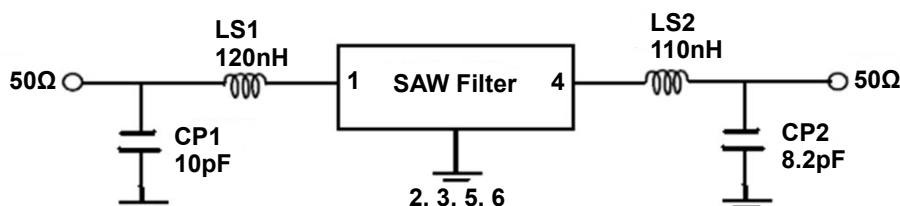
SM3030-6 Case

- *Ideal Front-End Filter for European Wireless Receivers*
- *Low-Loss, Coupled-Resonator Quartz Design*
- *Simple External Impedance Matching*

Rating	Value	Units
Input Power Level	13	dBm
DC Voltage	0	VDC
Storage Temperature with Tape and Reel	-40 to +85	°C
Operable Temperature Range	-40 to +105	°C
Soldering Temperature (10 sec/ 5 cycles max.)	260	°C

Characteristic	Sym	Notes	Minimum	Typical	Maximum	Units
Center Frequency	f_c			315		MHz
Minimum Insertion Loss (Relative to IL_{min})	IL_{min}					dB
Including loss of matching elements 314.47 to 315.53 MHz				2.0	3.0	
Excluding loss in matching elements 314.47 to 315.53 MHz				1.1	1.9	
Passband (relative to IL_{min}) 314.47 to 315.53 MHz				2.2	3.0	dB
314.45 to 315.55 MHz				2.7	3.4	
Attenuation (relative to IL_{min})						dB
10 to 140 MHz			66	71		
140 to 235 MHz			57	62		
235 to 300 MHz			44	49		
300 to 310 MHz			23	34		
310 to 313 MHz			9	14		
317 to 320 MHz			9	14		
320 to 325 MHz			15	20		
325 to 332 MHz			27	32		
332 to 352 MHz			36	41		
352 to 390 MHz			47	52		
390 to 1600 MHz			55	60		
1600 to 2500 MHz			50	55		
Package Size			SMD 3.0 X 3.0			mm
Lid Symbolization (Y=year WW=week S=shift)			5N YWWS			

Measurement Circuit



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



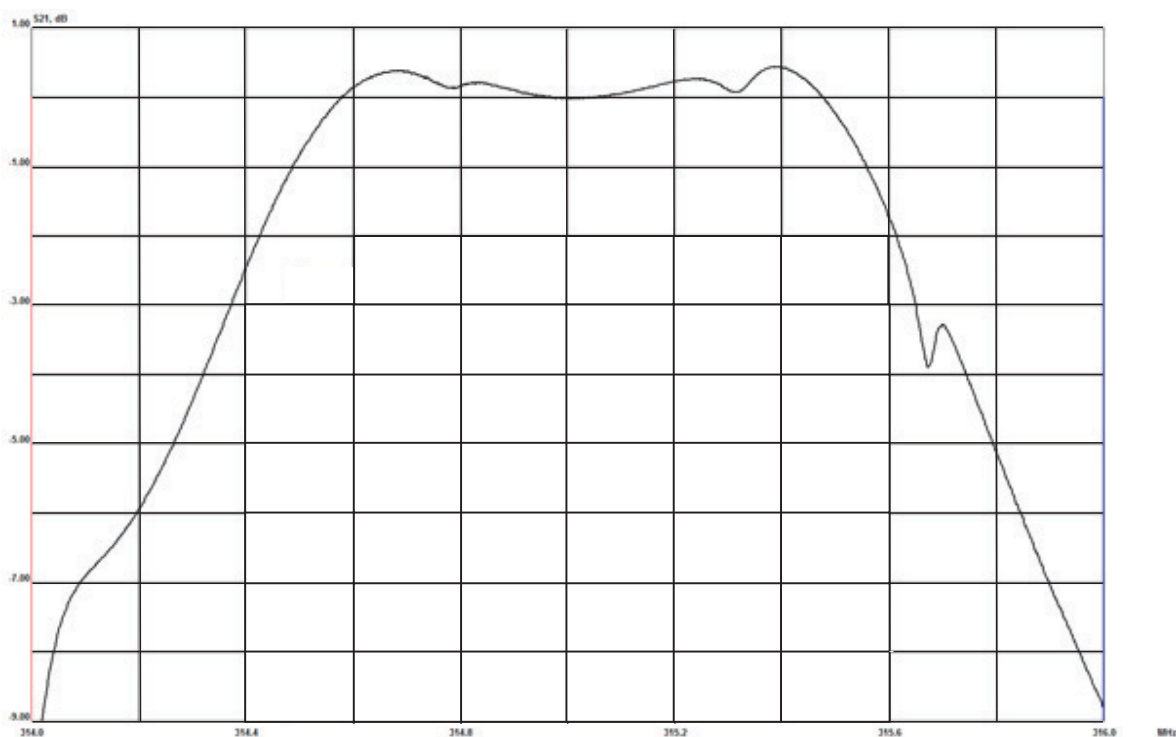
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

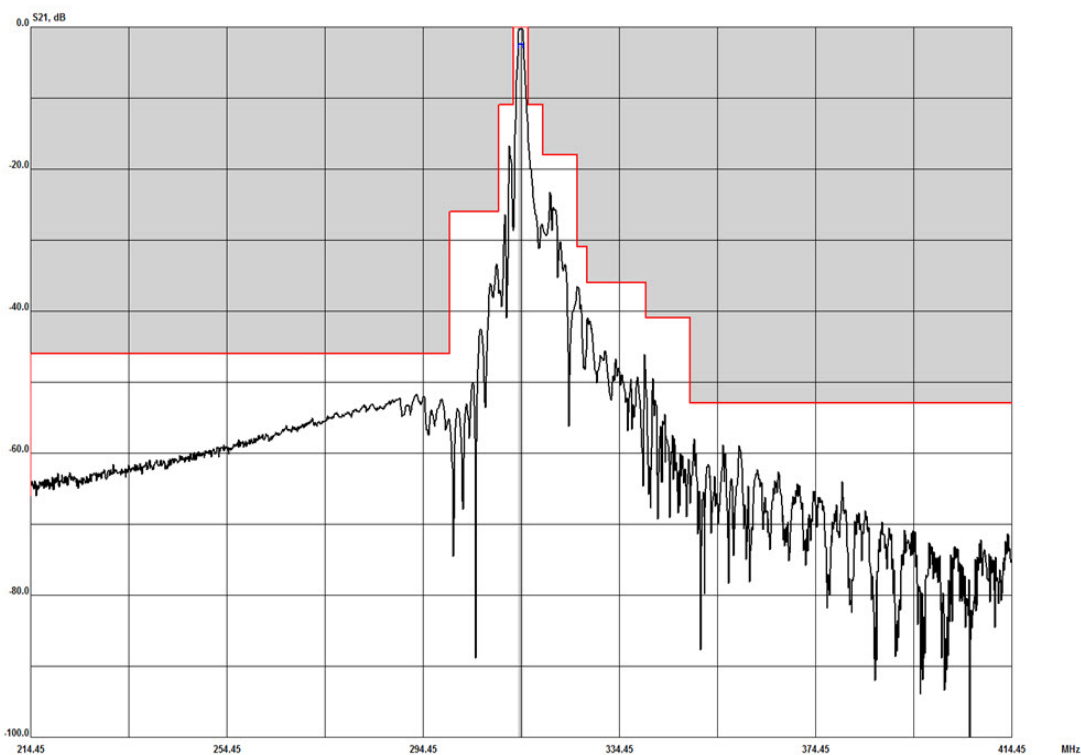
1. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture which is connected to a 50 Ω test system with VSWR \leq 1.2:1. The test fixture L and C are adjusted for minimum insertion loss at the filter center frequency, f_c . Note that insertion loss and bandwidth and passband shape are dependent on the impedance matching component values and quality.
2. The frequency f_c is defined as the midpoint between the 3dB frequencies.
3. Where noted specifications apply over the entire specified operating temperature range of -40°C to +105°C.
4. The turnover temperature, T_o , is the temperature of maximum (or turnover) frequency, f_o . The nominal frequency at any case temperature, T_c , may be calculated from: $f = f_o [1 - FTC (T_o - T_c)^2]$.
5. Frequency aging is the change in f_c with time and is specified at +65°C or less. Aging may exceed the specification for prolonged temperatures above +65°C. Typically, aging is greatest the first year after manufacture, decreasing significantly in subsequent years.
6. The design, manufacturing process, and specifications of this device are subject to change.
7. One or more of the following U.S. Patents apply: 4,54,488, 4,616,197, and others pending.
8. All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.
9. Tape and Reel Standard Per ANSI / EIA 481.
10. This product complies with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Frequency Characteristics

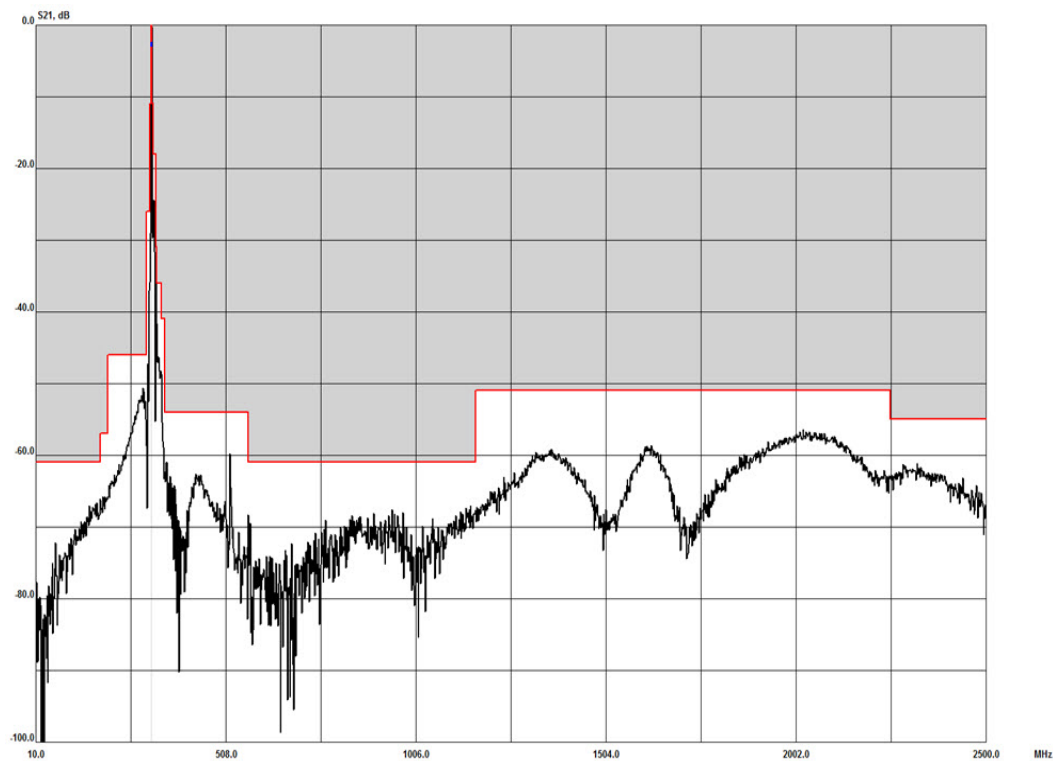
S21 Response: Span 2 MHz



S21 Response: Span 200 MHz

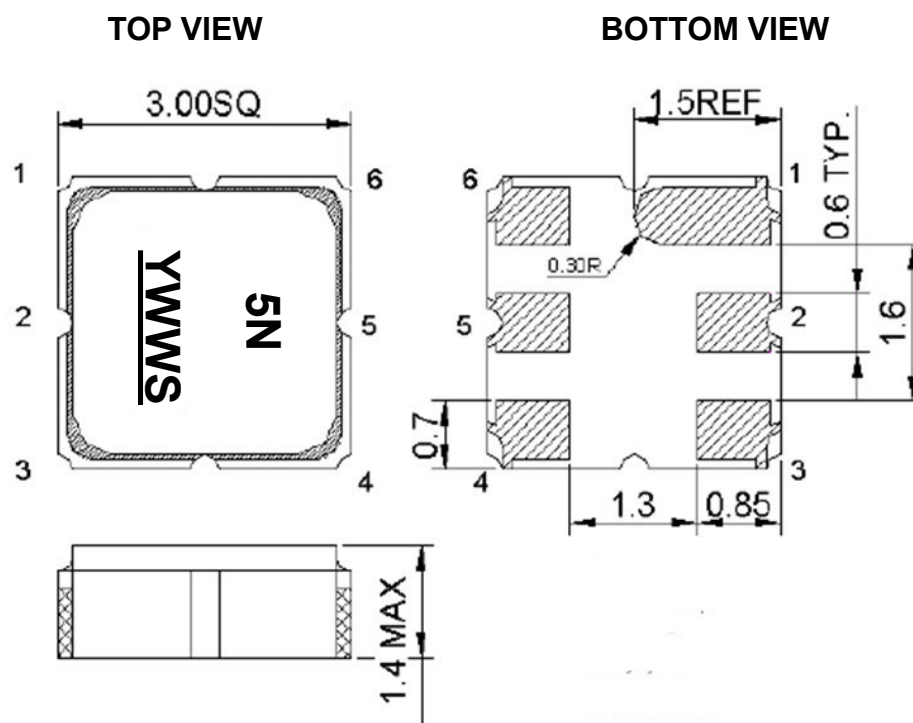
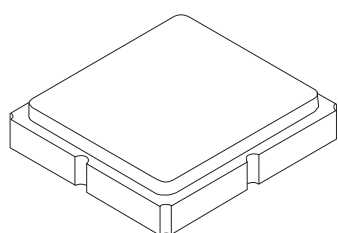


S21 Response: Span 10 MHz to 2.5 GHz



SM3030-6 Case

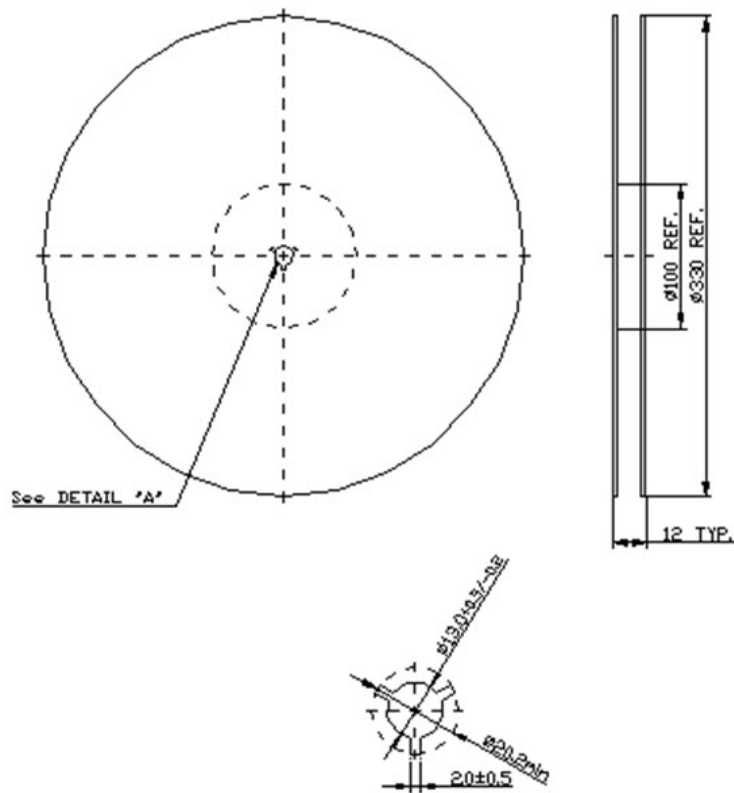
6-Terminal Ceramic Surface-Mount Case 3.0 X 3.0 mm Nominal Footprint



Case 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
Pb Free	

Reel Dimensions



Tape Dimensions

