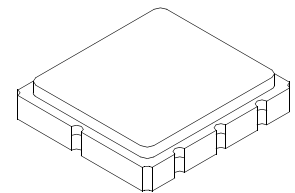


RF3626D

315 MHz SAW Filter



SM3838-8 Case
3.8 x 3.8

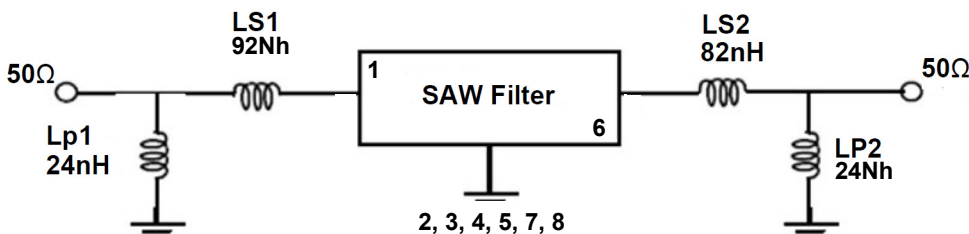
- *Ideal Front-End Filter for European Wireless Receivers*
- *Low-Loss, Coupled-Resonator Quartz Design*
- *Simple External Impedance Matching*
- *Complies with Directive 2002/95/EC (RoHS)*



Rating	Value	Units
Input Power Level	14	dBm
DC Voltage	6	VDC
Storage Temperature	-45 to +95	°C
Operable Temperature Range	-45 to +95	°C
Soldering Temperature (10 sec/ 5 cycles max.)	260	°C

Characteristic	Sym	Notes	Minimum	Typical	Maximum	Units
Center Frequency	f _c			315		MHz
2dB BW				1.11		MHz
3dB BW				1.21		
Minimum Insertion Loss (Relative to IL _{min}) Including loss of matching elements Excluding loss in matching elements	IL _{min}					dB
				2.6	2.8	
				1.1	1.9	
Passband (relative to IL _{min}) 314.85 to 315.15 MHz 314.82 to 315.18 MHz				0.12	2.0	dB
				0.13	3.0	
Attenuation (relative to IL _{min})						dB
10 to 280 MHz			37	41.5		
280 to 308 MHz			28	33.4		
308 to 313.20 MHz			13	17.3		
313.20 to 314.10 MHz			3	6.68		
315.90 to 316.50 MHz			4	8.2		
316.50 to 325 MHz			13	17.5		
325 to 335 MHz			25	30.7		
335 to 380 MHz			30	35.2		
380 to 600 MHz			47	50.0		
600 to 1500 MHz			57	61.2		
1500 to 2500 MHz			42	45.8		
Package Size			SMD 3.8 X 3.8			mm
Lid Symbolization (Y=year WW=week S=shift)	A69 YWWS					

Measurement Circuit



Pin	Connection
1	Input or Input Ground
2	Input Ground or Input
5	Output or Output Ground
6	Output Ground or Output
3, 4, 7, 8	Ground

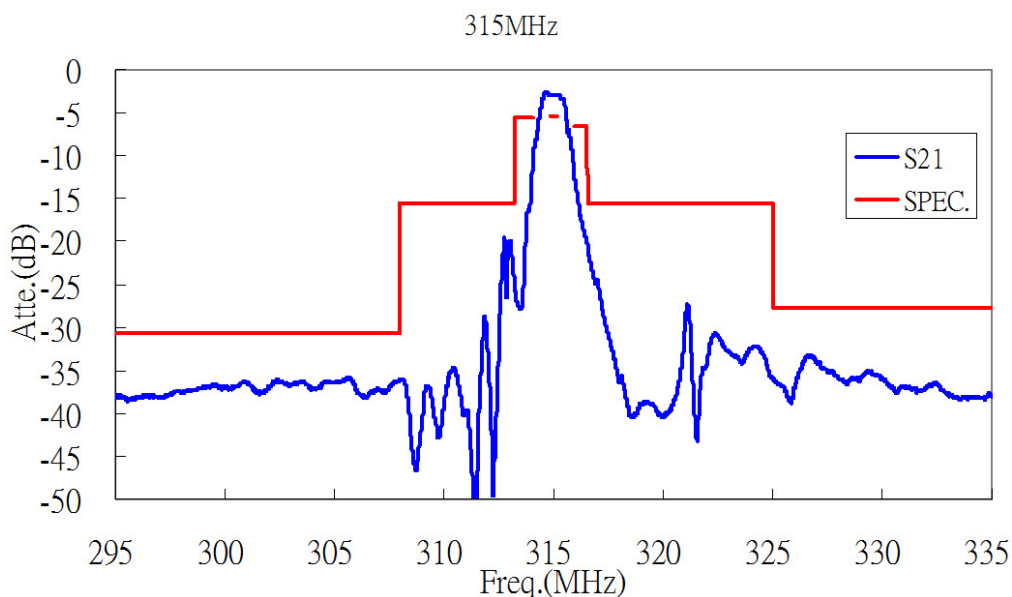
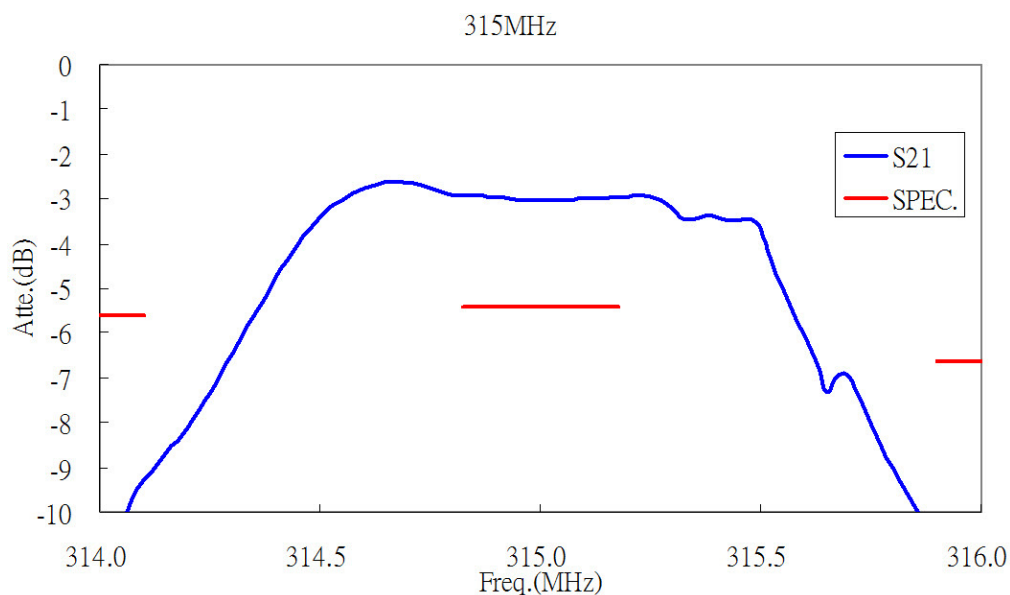


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

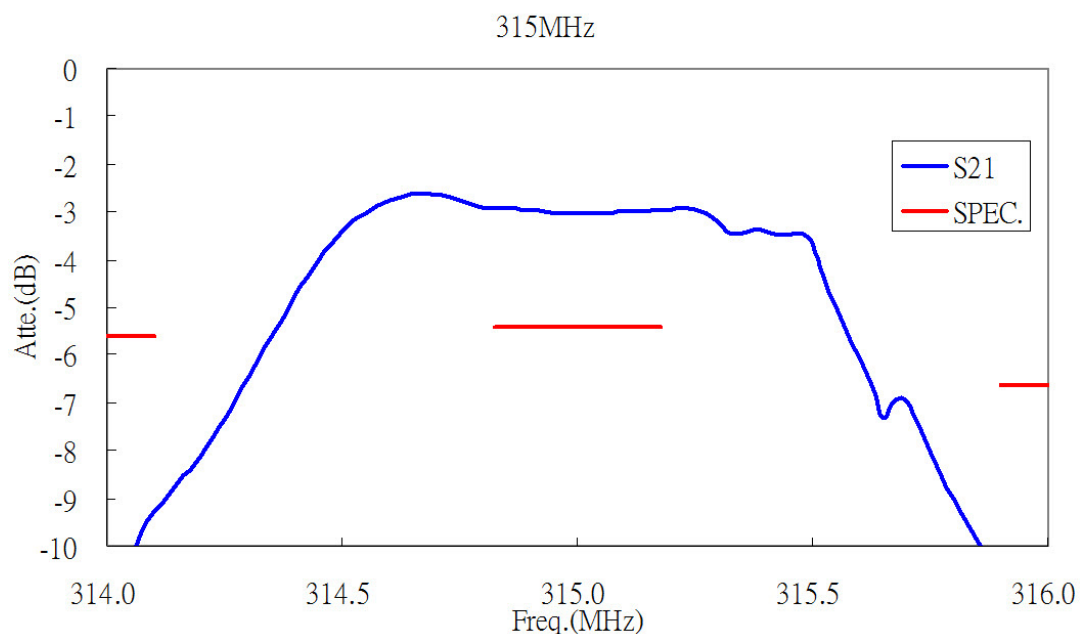
NOTES:

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: $f = f_o [1 - \text{FTC} (T_o - T_c)^2]$.
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

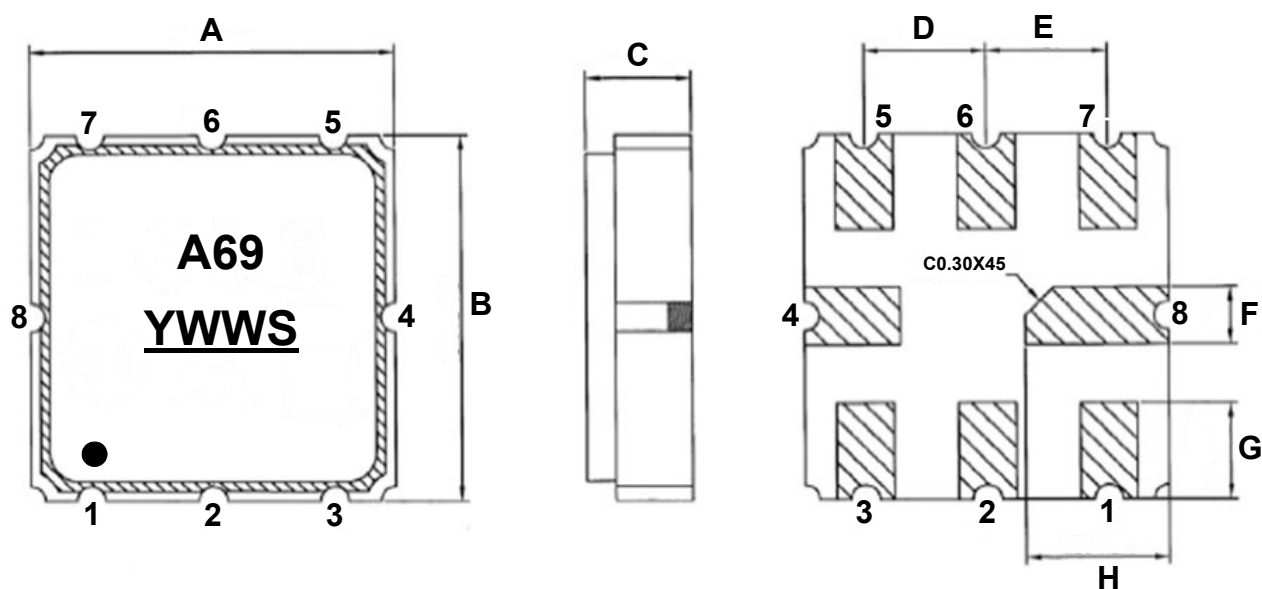


Wideband:

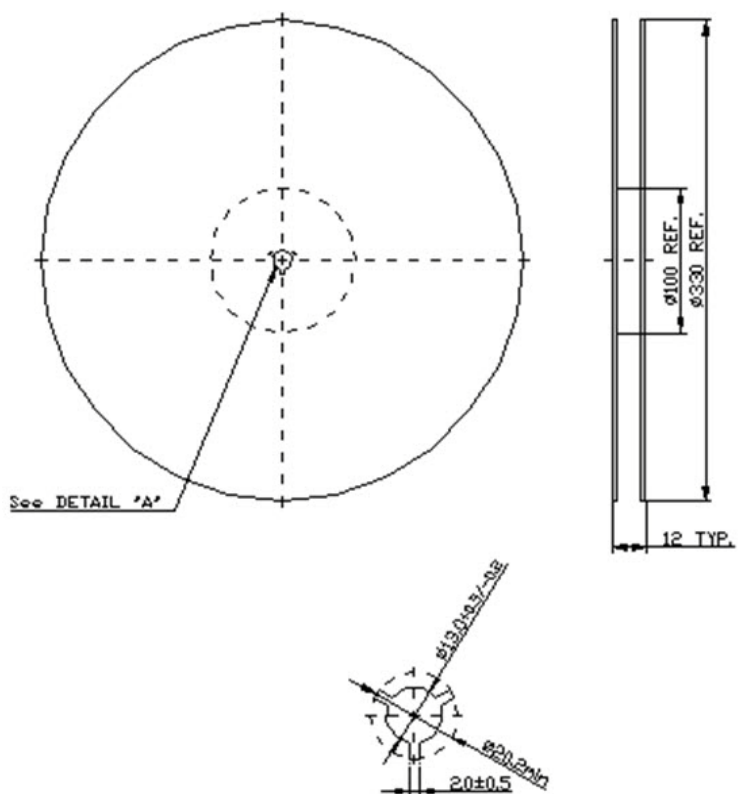


Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.65	3.8	3.95	0.143	0.149	0.155
B	3.65	3.8	3.95	0.143	0.149	0.155
C	-	-	1.7	-	-	0.066
D	-	1.27	-	-	0.050	-
E	-	1.27	-	-	0.050	-
F	-	0.60	-	-	0.023	-
G	-	1.00	-	-	0.039	-
H	-	1.50	-	-	0.059	-



Reel Dimensions



Tape Dimensions

