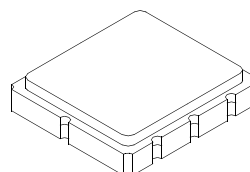


SF2350D

**345 MHz
SAW Filter**



SM3838-8 Case 3.8 x 3.8

- **Designed for 801.11 Applications**
- **Hermetically sealed Surface Mount package**
- **Complies with Directive 2002/95/EC (RoHS)**



Rating	Value	Units
Input Power Level	10	dBm
DC Voltage	3	V
Operating Temperature	-40 to +125	°C
Storage Temperature	-40 to +125	°C

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_c	1, 2, 3		345		MHz
Amplitude Ripple 344.6 to 345.4 MHz				0.4	1.3	dB
Insertion Loss 344.6 to 345.4 MHz	IL _{MIN}	1, 3		2.3	3.3	dB
Attenuation: (relative to IL _{min})						
10 to 320 MHz		1, 3	50	60		dB
320 to 325 MHz			50	55		
325 to 337 MHz			40	45		
337 to 339 MHz			40	45		
351 to 358 MHz			13	20		
358 to 370 MHz			35	40		
370 to 700 MHz			47	52		
700 to 1000 MHz			40	45		
Temperature Freq. Temp. Coefficient				-30		ppm/°C ²
Lid Symbolization (Y=year WW=week S=shift)				B18 // YWWS		
Standard Reel Quantity	Reel Size 7 Inch Reel Size 13 Inch	9		500 Pieces/Reel		
				3000 Pieces/Reel		



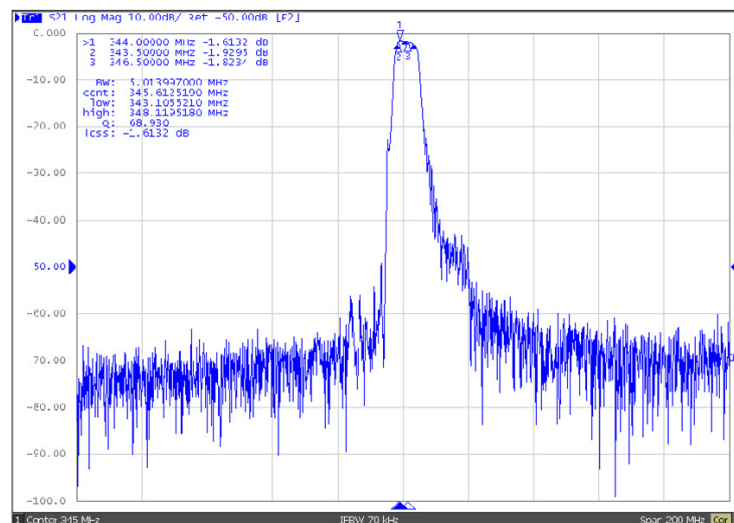
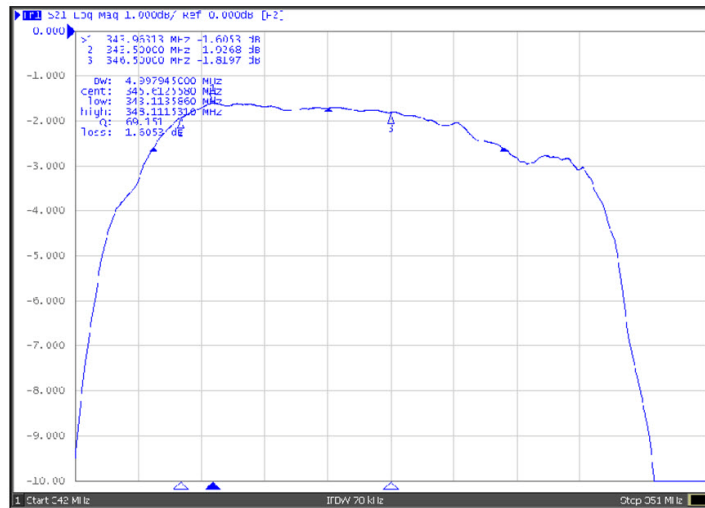
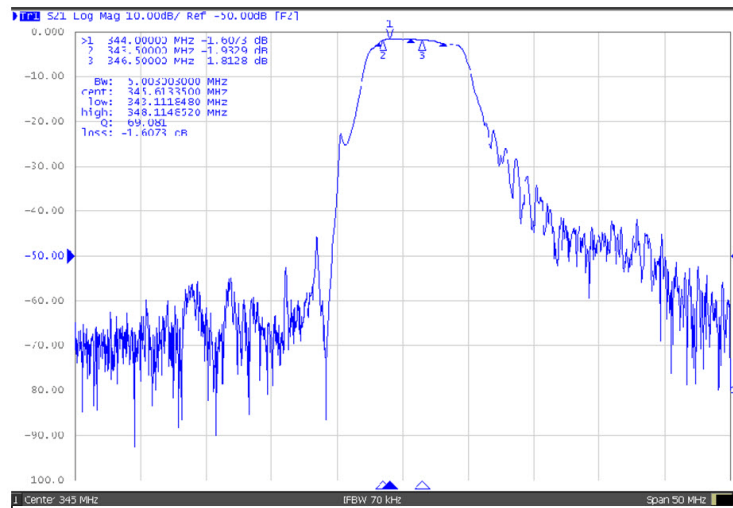
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

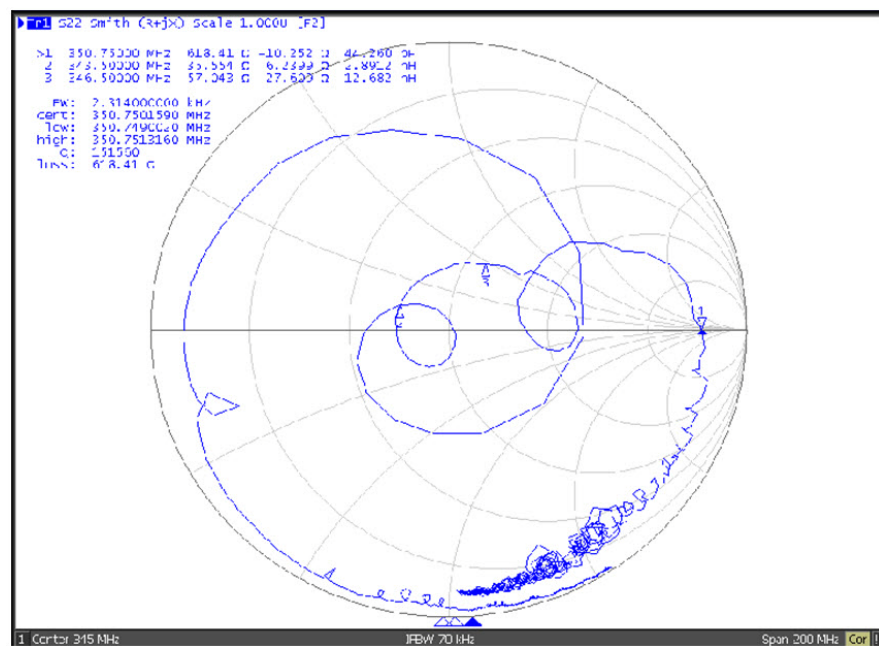
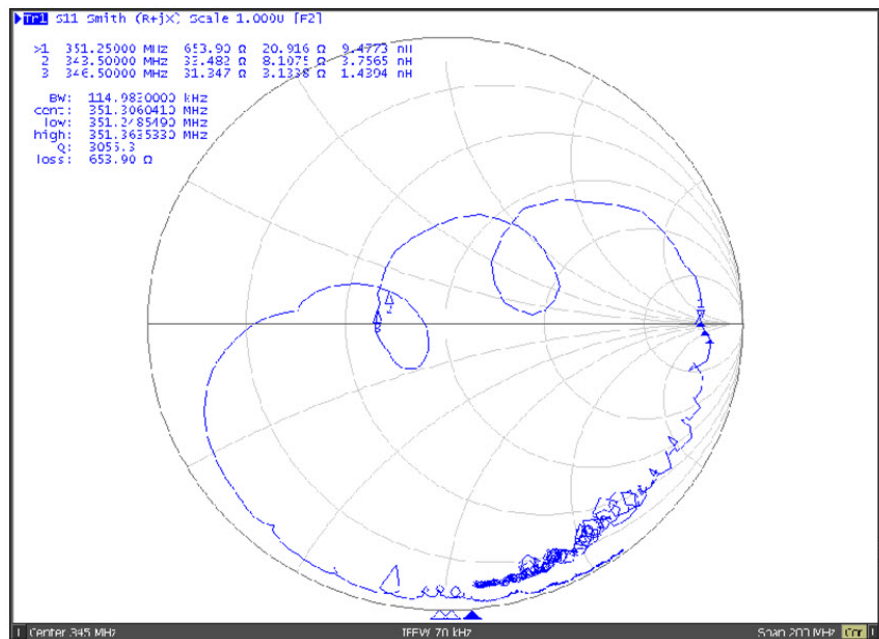
1. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture which is connected to a 50 Ω test system with VSWR \leq 1.2:1. The test fixture L and C are adjusted for minimum insertion loss at the filter center frequency, f_c . Note that insertion loss and 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 +90°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.

SF2350D S21 Measurement

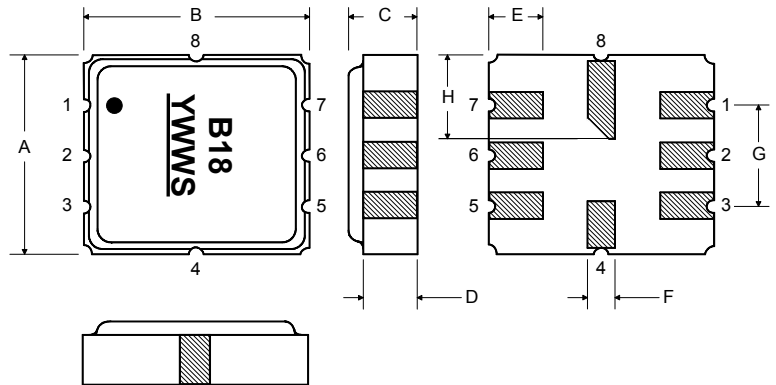


SF2350D S11/S22 Measurement

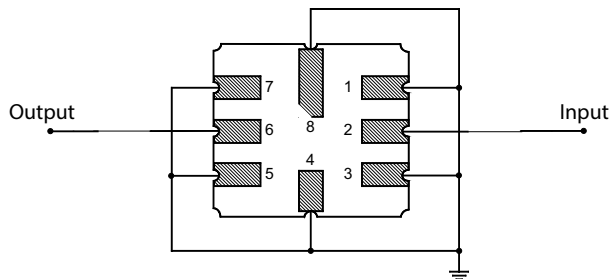


Electrical Connections

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



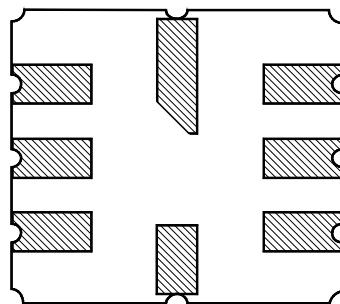
Matching Circuit to 50Ω



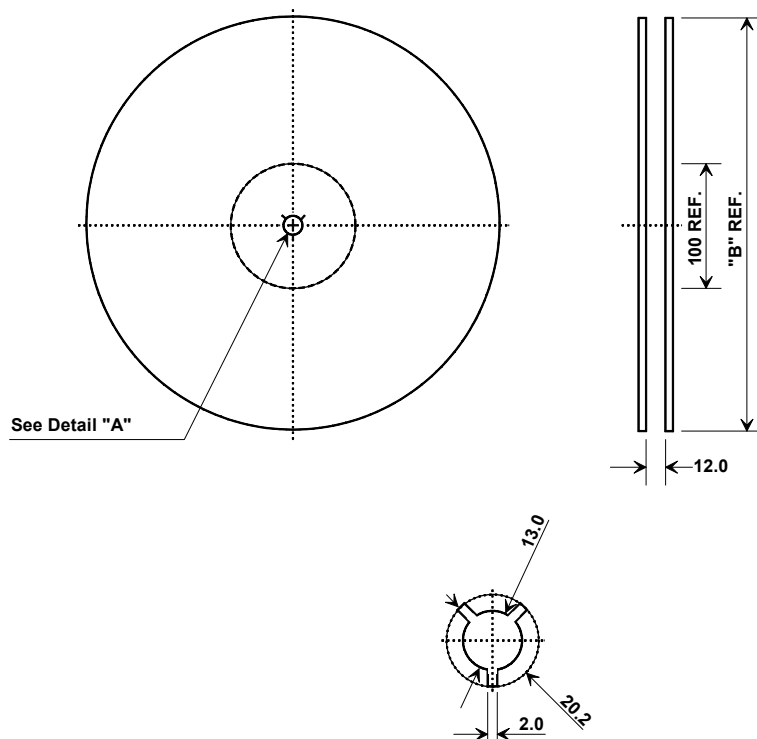
Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.6	3.8	4.0	0.14	0.15	0.16
B	3.6	3.8	4.0	0.14	0.15	0.16
C	1.00	1.20	1.40	0.04	0.05	0.055
D	0.95	1.10	1.25	0.033	0.043	0.05
E	0.90	1.0	1.10	0.035	0.04	0.043
F	0.50	0.6	0.70	0.020	0.024	0.028
G	2.39	2.54	2.69	0.090	0.100	0.110
H		1.50			0.059	

PCB Footprint



Tape and Reel Specifications



“B “ Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	1000
13	330	3000

COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	5.1 mm
Bo	5.6 mm
Ko	1.0 mm
Pitch	8.0 mm
W	16.0 mm

