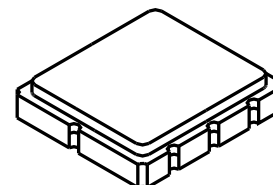


SF2351C

**161 MHz
IF SAW Filter**



SM5050-8

- **Hermetically sealed Surface Mount package**
- **Complies with Directive 2002/95/EC (ROHS)**

Rating	Value	Units
Input Power Level	10	dBm
Operating Temperature	-40 to +85	°C
Storage Temperature	-40 to +85	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_c	1, 2, 3		161		MHz
Insertion Loss	IL_{MIN}	1, 3		10.0	12.0	dB
Passband Ripple	$f_c \pm 11\text{MHz}$			0.6	1.2	dB
Passband Flatness				0.3	0.6	dB
Group Delay Ripple	$f_c \pm 11\text{MHz}$			50	80	nsec
Attenuation: (relative to IL_{min})		1, 3				dB
Lower 20 dB Band Edge			143.5	144.5		
Upper 20 dB Band Edge				177.5	178.5	
Lower 30 dB Band Edge			142	143.5		
Upper 30 dB Band Edge				178.5	180	
10 to 141 MHz			40	46		
181 to 600 MHz			35	43		
Temperature Freq. Temp. Coefficient				-94		ppm/°C ²
Lid Symbolization (Y=year WW=week S=shift)	B19 // YWWS					
Standard Reel Quantity	Reel Size 7 Inch	9	500 Pieces/Reel			
	Reel Size 13 Inch		3000 Pieces/Reel			



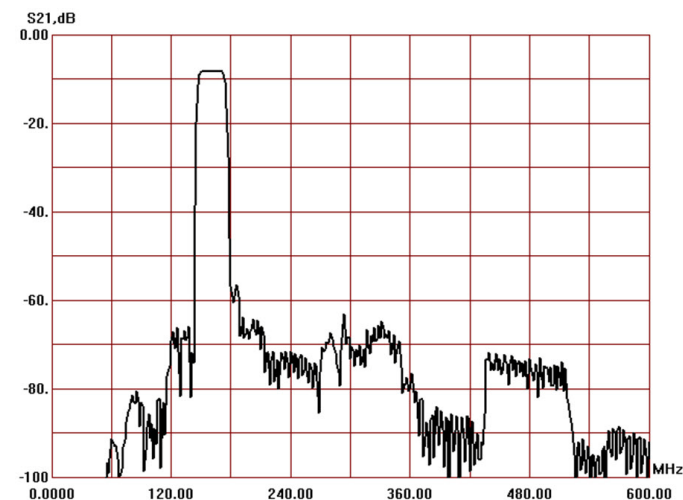
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

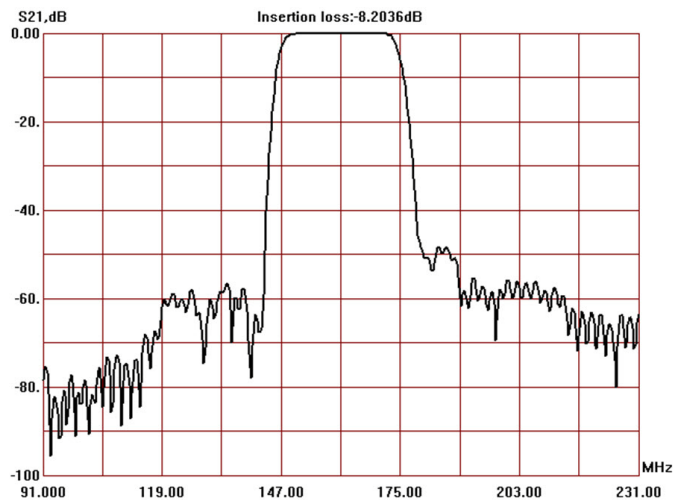
1. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture which is connected to a 50 Ω test system with VSWR $\leq 1.2:1$. The test fixture L and C are adjusted for minimum insertion loss at the filter center frequency, f_c . Note that insertion loss 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:
$$f = f_O [1 - FTC (T_O - T_C)^2]$$
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.

Frequency Responses

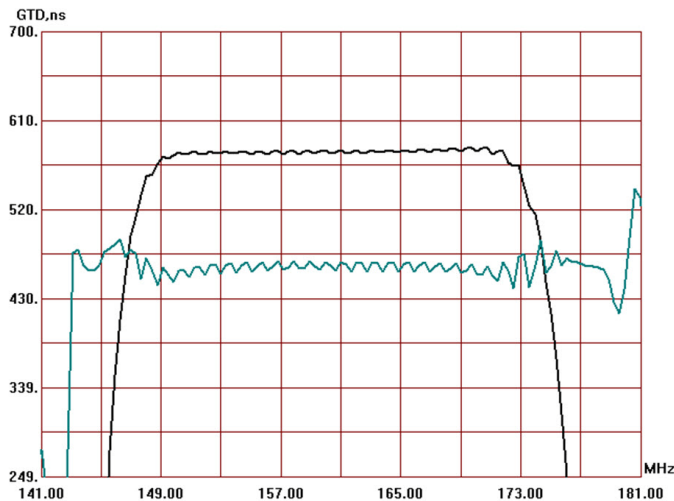
Wideband Response (span 600 MHz)



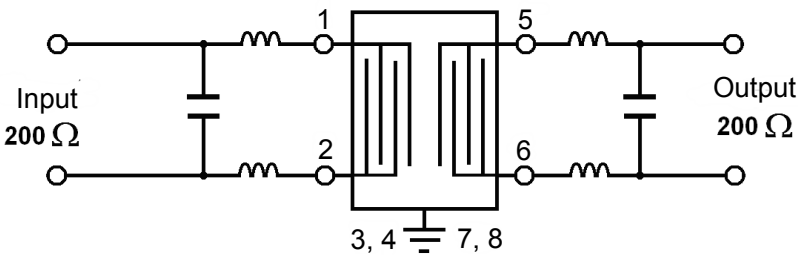
Wideband



Passband Response (span 60 MHz)



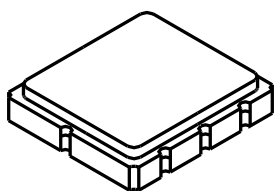
Electrical Connections



Connection	Terminals
RF Balanced input +	1
RF Balanced Input -	2
RF Balanced Output +	5
RF Balanced Output -	6
Case Ground	4, 8
Ground	3, 7

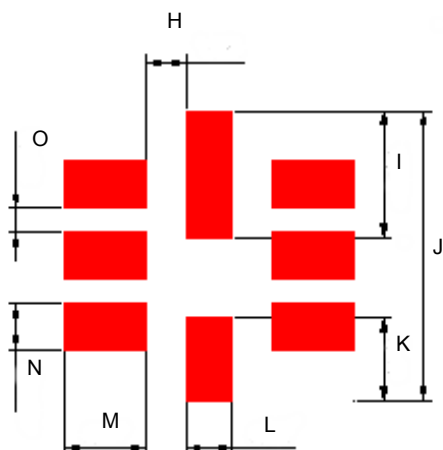
8-Terminal Ceramic Surface-Mount Case

5.0 X



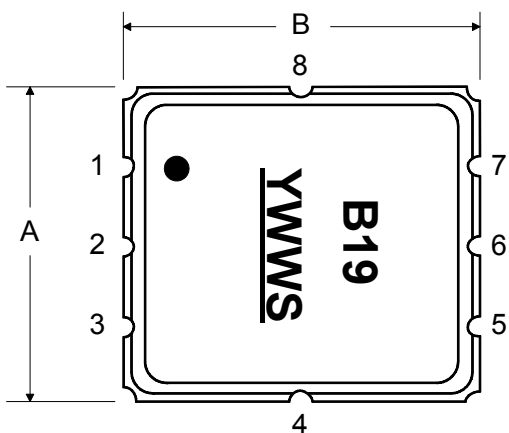
Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	4.80	5.00	5.20	0.189	0.197	0.205
B	4.80	5.00	5.20	0.189	0.197	0.205
C	1.30	1.50	1.70	0.050	0.060	0.067
D	1.98	2.08	2.18	0.078	0.082	0.086
E	1.07	1.17	1.27	0.042	0.046	0.050
F	0.50	0.64	0.70	0.020	0.025	0.028
G	2.39	2.54	2.69	0.094	0.100	0.106
H		0.71			0.027	
I		2.28			0.089	
J		5.20			0.204	
K		1.47			0.057	
L		0.84			0.033	
M		1.47			0.057	
N		0.84			0.033	
O		0.43			0.016	



PCB Foot Print Dimensions
in Nominal Inches

TOP VIEW



BOTTOM VIEW

