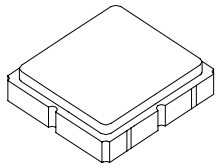
Preliminary

SF1202D

465.0 MHz SAW Filter

- ***CDMA 450 F-Band RF SAW Filter***
- ***3.8 x 3.8 x 1.4 mm Surface-mount Package***
- ***Complies with Directive 2002/95/EC (RoHS)***



SM3838-6

Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+28	dBm
Maximum DC voltage between any Two Terminals	30	VDC
Storage Temperature Range	-40 to +85	°C
Suitable for Lead-free Soldering - Maximum Soldering Profile	260°C for 30 s	

Electrical Characteristics

Characteristic		Sym	Notes	Min	Typ	Max	Units
Nominal 1 dB Center Frequency		f_C			465.0		MHz
Passband Insertion Loss	462.5 to 467.5 MHz	IL	1		2.8	3.5	dB
VSWR	462.5 to 467.5 MHz				1.6:1	2:1	
Rejection	0.3 to 452.5 MHz			48	52		
	452.5 to 457.5 MHz			35	50		
	452.5 to 457.5 MHz, +15 to +40 ° C			40	53		
	485.0 to 507.5 MHz		1, 2, 3	40	53		dB
	507.5 to 1200 MHz			38	42		
	1200 to 1700 MHz			30	35		
	1700 - 2000 MHz			20	30		
Operating Temperature Range		T_A	1	-30		+85	°C
Impedance at f_c	Source, single ended	50 ohm					
	Load, single ended	50 ohm					

Case Style	SM3838-6 3.8 x 3.8 mm Nominal Footprint
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator	602, YWWS
Standard Reel Quantity Reel Size 7 Inch	1000 Pieces/Reel
Reel Size 13 Inch	3000 Pieces/Reel

Electrical Connections

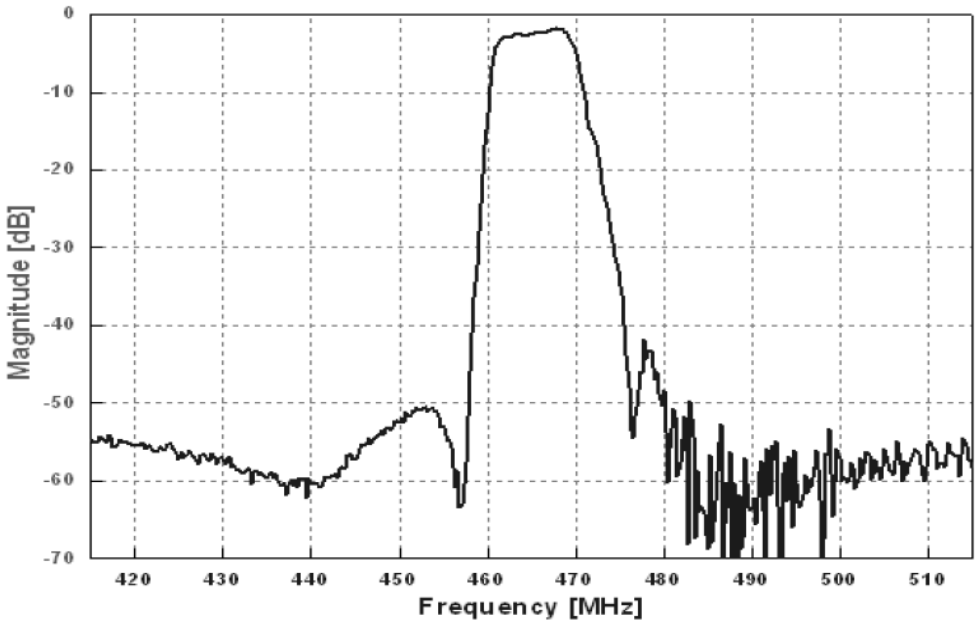
Connection	Terminals
Port 1	2
Port 2	5
Case Ground	All others

CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

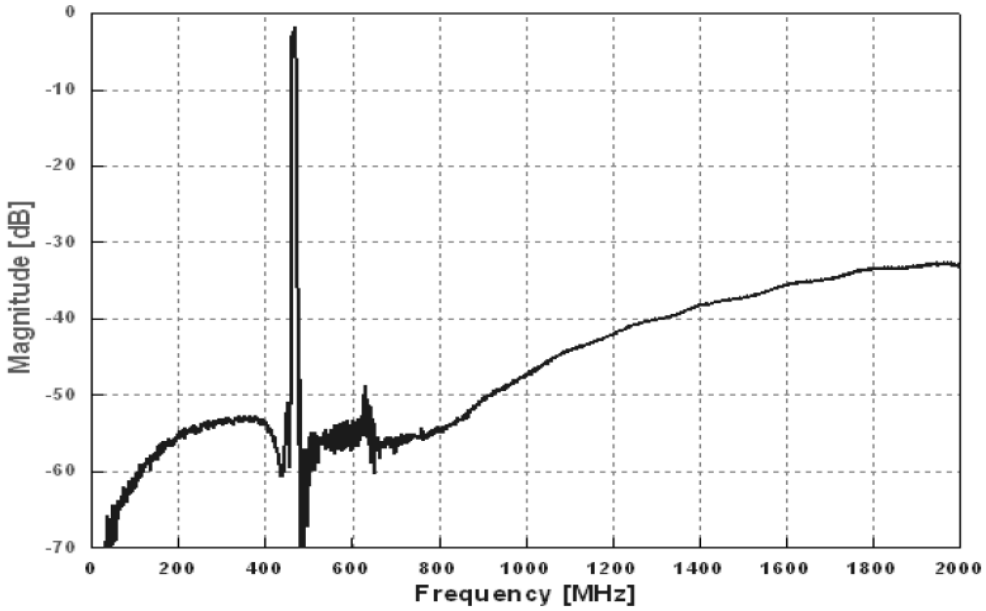
Notes:

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. "LRIP" or "L" after the part number indicates "low rate initial production" and "ENG" or "E" indicates "engineering prototypes."
5. The design, manufacturing process, and specifications of this filter are subject to change.
6. Either Port 1 or Port 2 may be used for either input or output in the design. However, impedances and impedance matching may vary between Port 1 and Port 2, so that the filter must always be installed in one direction per the circuit design.
7. US and international patents may apply.
8. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.

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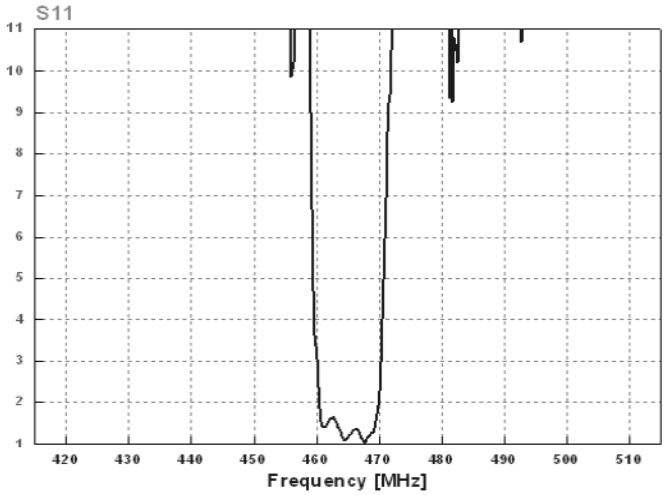


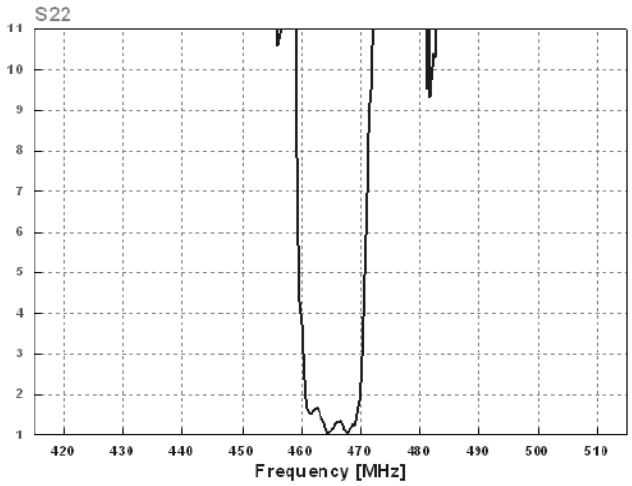
Passband Plot



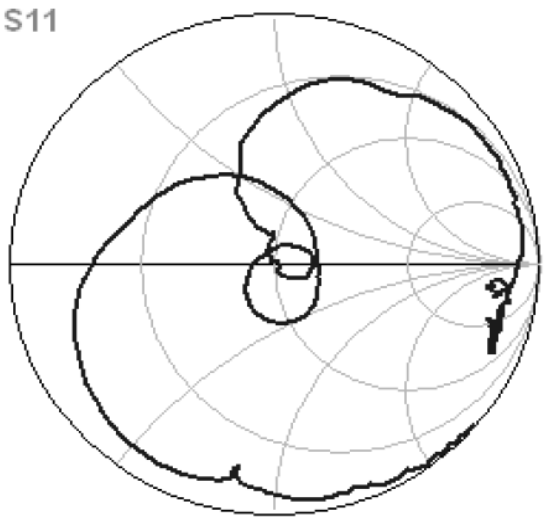
Wideband Plot

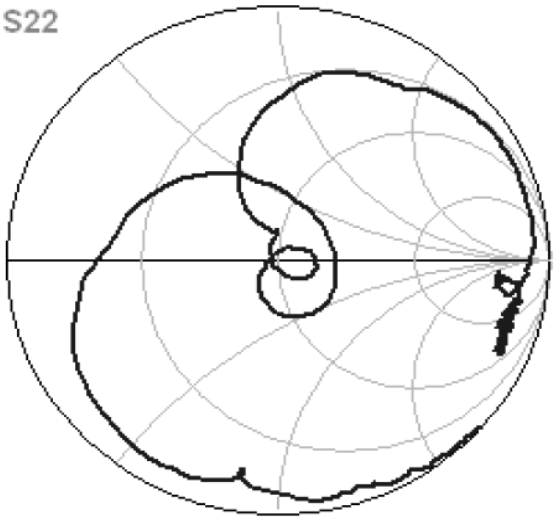
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VSWR

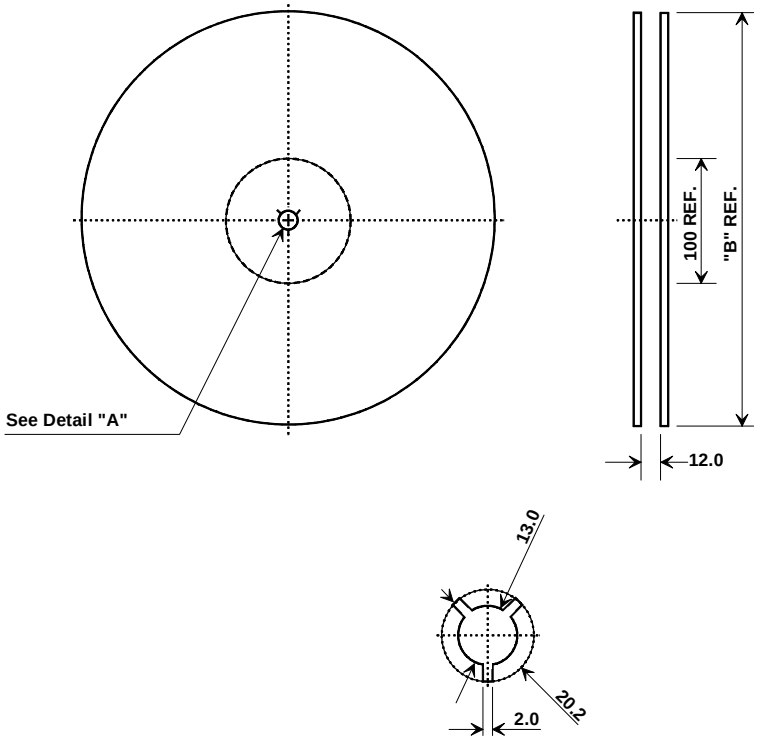




S11 and S22 Plots

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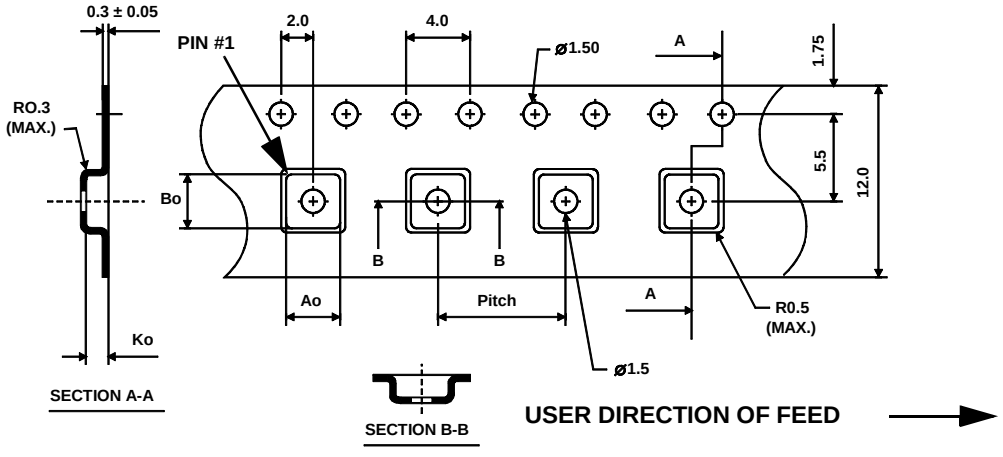
Tape and Reel Specifications



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

COMPONENT ORIENTATION and DIMENSIONS

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

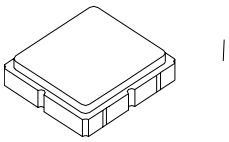


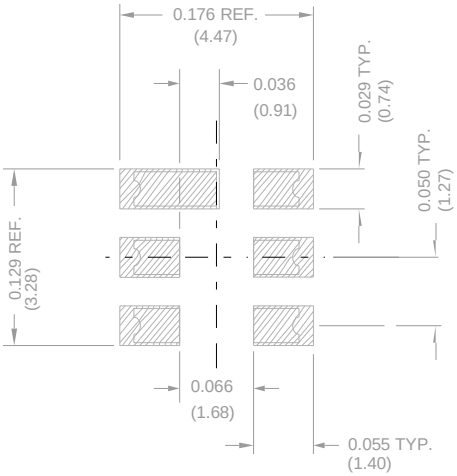
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SM3838-6 Case

6-Terminal Ceramic Surface-Mount Case

3.8 X 3.8 mm Nominal Footprint





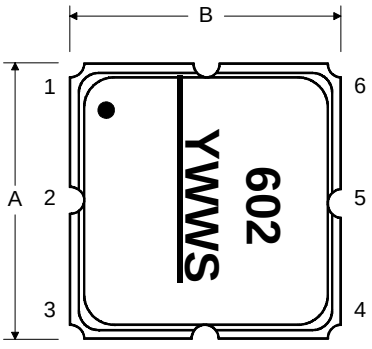
PCB Footprint

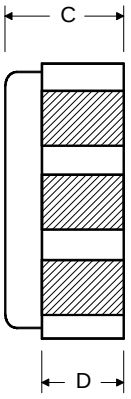
Case Dimensions						
Dimension	**mm**			**Inches**		
	Min	**Nom**	**Max**	**Min**	**Nom**	**Max**
A	3.60	3.80	4.0	0.14	0.15	0.16
B	3.60	3.80	4.0	0.14	0.15	0.16
C	1.30	1.50	1.70	0.05	0.06	0.067
D	0.95	1.10	1.25	0.037	0.043	0.05
E	2.39	2.54	2.69	0.090	0.10	0.110
G	0.90	1.0	1.10	0.035	0.04	0.043
H	1.90	2.0	2.10	0.75	0.08	0.83
I	0.50	0.6	0.70	0.020	0.024	0.028
J	1.70	1.8	1.90	0.067	0.07	0.075

Electrical Connections		
Connection		**Terminals**
Port 1	Single Ended Input	2
Port 2	Single Ended Output	5
	Ground	All others
Single Ended Operation Only		
Dot indicates Pin 1		

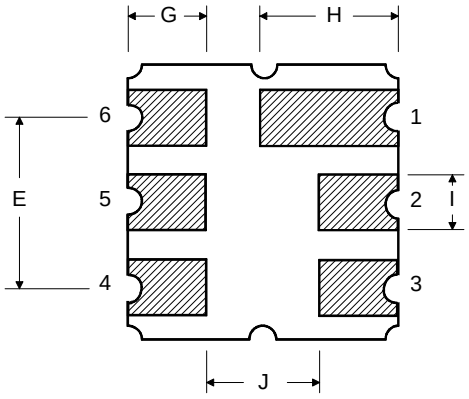
Materials	
Solder Pad Termination	Au plating 30 - 60 µinches (76.2-152 µm) over 80-200 µinches (203-508 µm) Ni.
Lid	Fe-Ni-Co Alloy Electroless Nickel Plate (8-11% Phosphorus) 100-200 µinches Thick
Body	Al_2O_3 Ceramic
Pb Free	

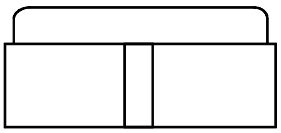
TOP VIEW





BOTTOM VIEW





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