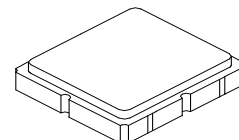


SF2419D

**495 MHz
SAW Filter**



SM3838-8 Case

- *Hermetically sealed Surface Mount package*
- *Complies with Directive 2002/95/EC (RoHS)*
- *Moisture Sensitivity Level: 1*

Absolute Maximum Ratings

Rating	Value	Units
Maximum Input Power	+10	dBm
DC Voltage	3	VDC
Operating Temperature	-40 to +85	°C
Storage Temperature	-40 to +85	°C

Electrical Characteristics

Characteristic	Sym	Notes	Minimum	Typical	Maximum	Units
Center Frequency	f_c			495		MHz
Insertion Loss (490 to 500) MHz				1.9	3.5	dB
Amplitude Ripple (490 to 500 MHz)				0.6	1.5	dB
VSWR (490 to 500 MHz)				1.3	2.3	
Attenuation (Reference level from 0dB)						dB
$f_c -45.8$ to $f_c -39.8$ MHz			50	58		
$f_c +39.8$ to $f_c +45.8$ MHz			43	49.5		
Temperature Coefficient of Frequency				-36		ppm/°C
Source Impedance	Z_S			50		Ω
Load Impedance	Z_L			50		Ω

Footprint Size: 3.8 X 3.8

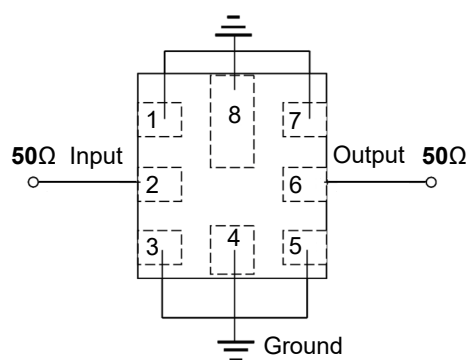
SM3838-8

Lid Symbolization (Y=Year, WW=week, S=shift)

B39 YWWS

Electrical Connections

Connection	Terminals
Input	2
Output	6
Ground	All Others

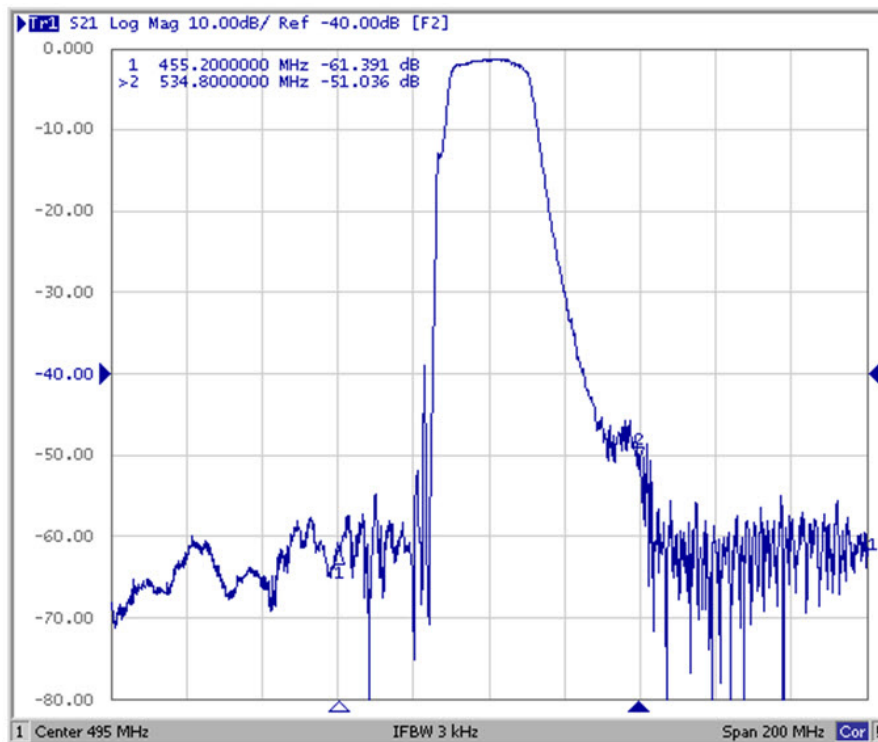
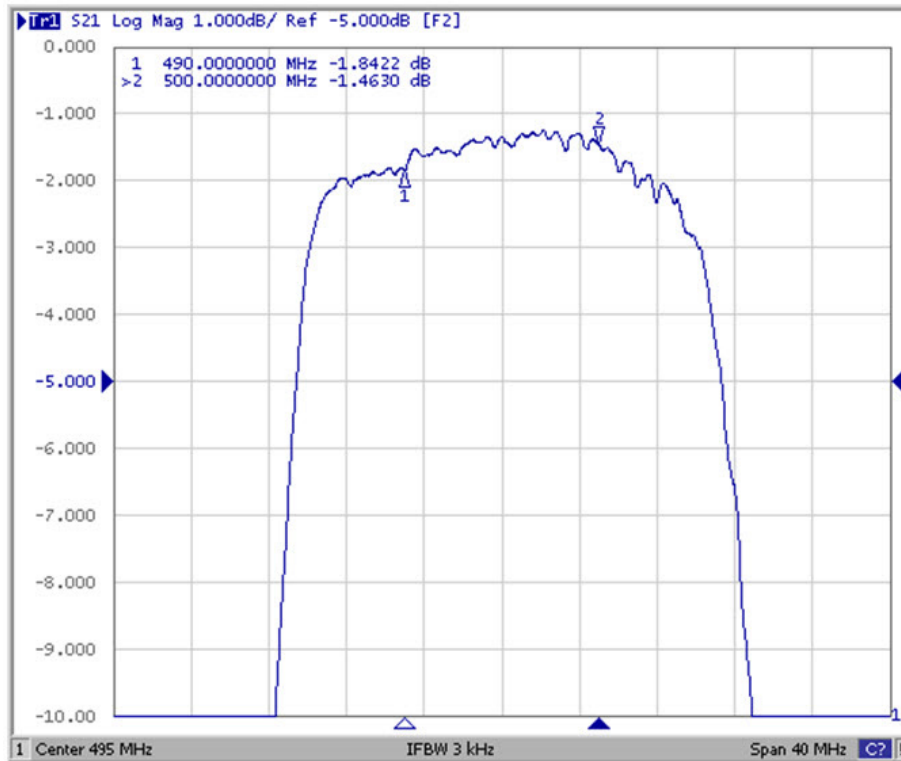


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

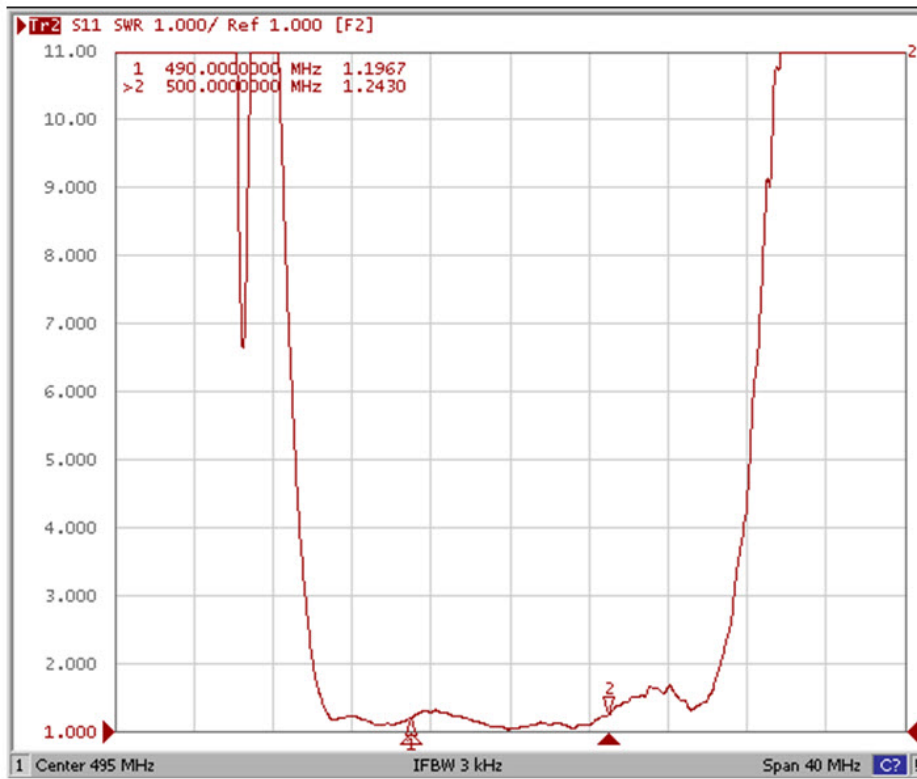
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Frequency Characteristics

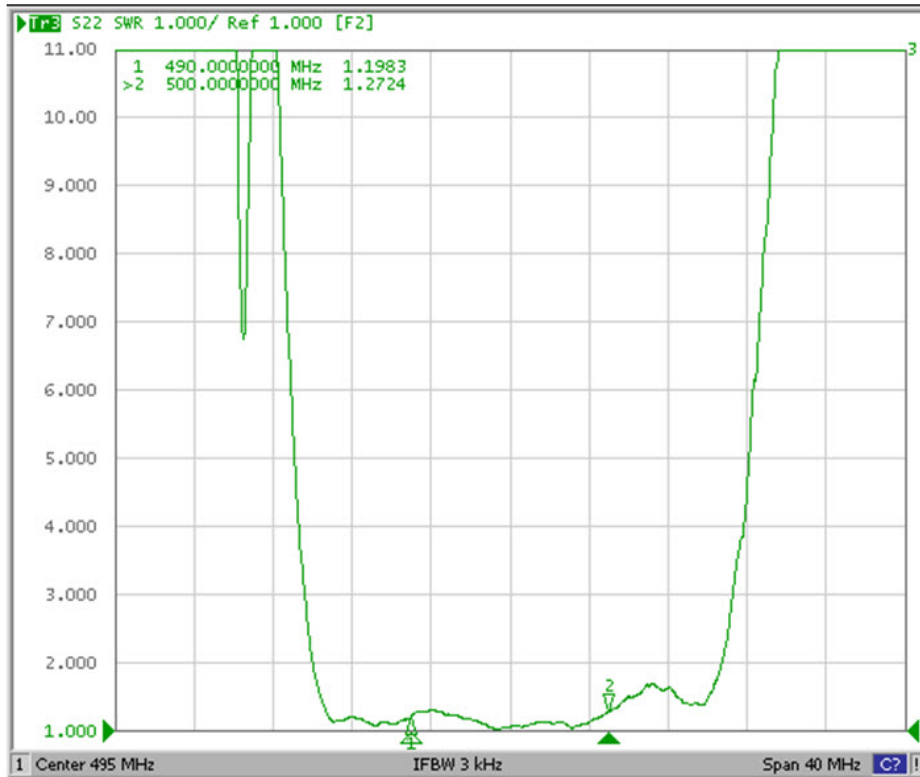


Reflection Functions

S11



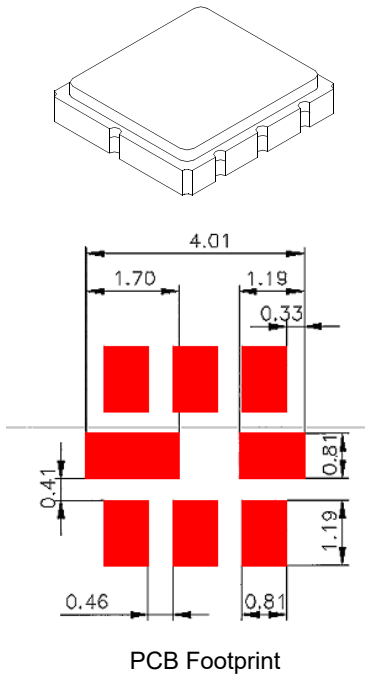
S22



SM3838-8 Case

8-Terminal Ceramic Surface-Mount Case

3.8 X 3.8 mm Nominal Footprint



Case Dimensions						
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.65	3.8	3.95	0.14	0.149	0.155
B	3.65	3.8	3.95	0.14	0.149	0.155
C	-	-	1.40	-	-	0.055
D	-	1.0	-	-	0.04	-
E	-	1.0	-	-	0.04	-
F	-	0.6	-	-	0.02	-
G	-	2.54	-	-	0.100	-
H	-	1.5	-	-	0.06	-

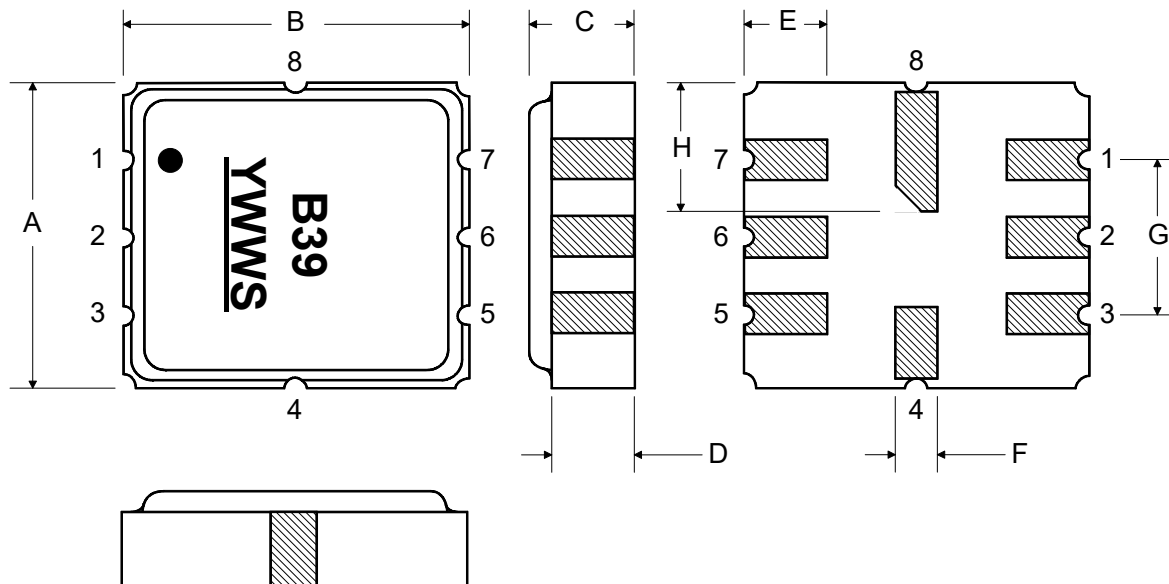
Electrical Connections		
	Connection	Terminals
Port 1	Input	2
Port 2	Output	6
	Ground	All Others

Dot Indicates Pin 1

Materials	
Solder Pad Termination	Au plating 30 - 60 μ inches (76.2-152 μ M) over 80-200 μ inches (203-508 μ M) Ni.
Lid	Fe-Ni-Co Alloy Electroless Nickel Plate (8-11% Phosphorus) 100-200 μ inches Thick
Body	Al ₂ O ₃ Ceramic

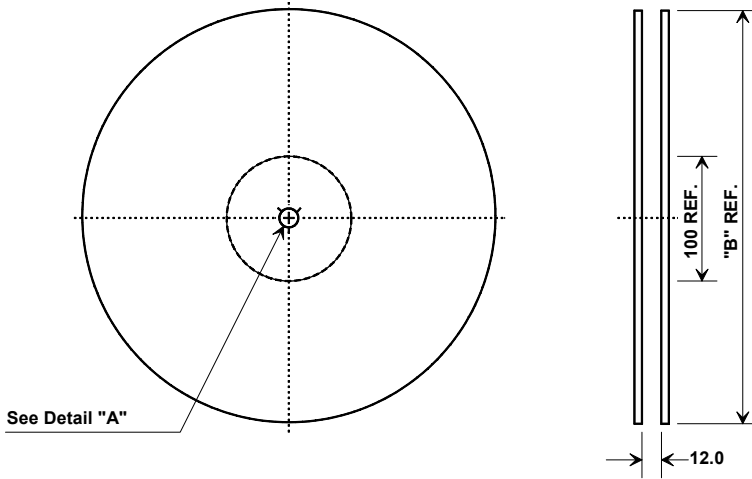
TOP VIEW

BOTTOM VIEW

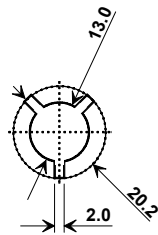


Tape and Reel Specifications

Tape and Reel Standard per ANSI/EIA-481

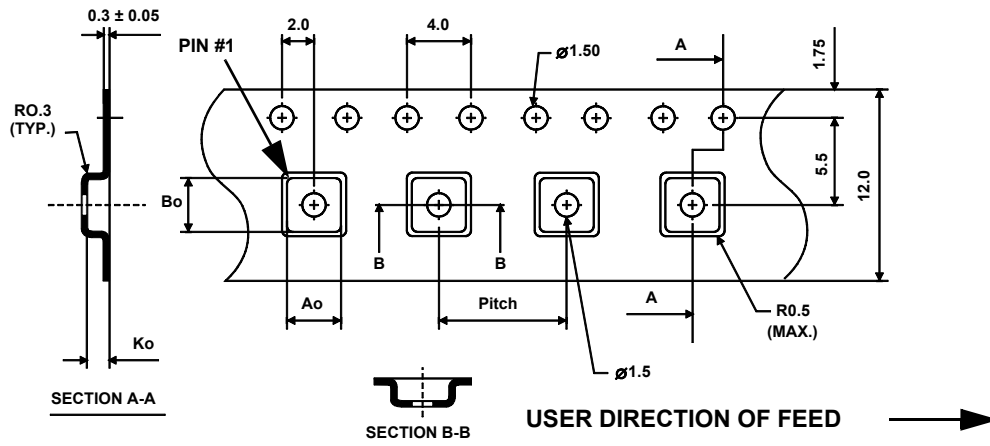


"B" Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	3000



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



Recommended Reflow Profile

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C +0/-5°C peak (10 seconds).
4. Time: 5 times maximum.

