

- Designed for SDARS Receiver IF Application
- Low Insertion Loss
- 3.8 X 3.8 X 1.2 mm Surface-Mount Case
- Differential Input and Output
- Complies with Directive 2002/95/EC (RoHS)
- Moisture Sensitivity Level: 1
- AEC-Q200 Qualified

Absolute Maximum Ratings

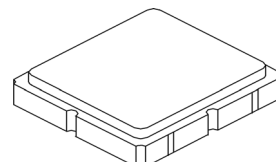
Rating	Value	Units
Maximum Incident Power in Passband	+10	dBm
Max. DC voltage between any 2 terminals	30	VDC
Storage Temperature Range	-40 to +85	°C
Suitable for lead-free soldering - Max Soldering Profile	260°C for 30 s	

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C		467.704	467.751	467.798	MHz
Insertion Loss	IL			12	13	dB
Amplitude Ripple (p-p)					2.0	dB
					2.0	
					2.0	
					2.0	
					2.0	
					2.0	
Pass bandwidth of -2.0dB centered at f_C				13.0		MHz
Pass bandwidth of -3 dB						
Low Side Attenuation between 455.751 to 457.251 MHz (f_C -10.5 MHz)			32			dB
Low Side Attenuation $F < 455.751$ MHz			32			
High Side Attenuation between 476.751 to 479.751 MHz (f_C +9.0 MHz)			20			
High Side Attenuation $F > 479.751$ MHz			32			
Temperature Coefficient of frequency					-18	ppm/K
Delay Ripple (p-p)					100	ns
					100	
					120	
					120	
					100	
					100	
Source Impedance	ZS			150		Ω
Load Impedance	ZL			150		Ω
Case Style			SM3838-8 3.8 x 3.8 mm Nominal Footprint			
Lid Symbolization (YY=year, WW=week, S=shift)			380 YWWS			

SF2024D

**467.751 MHz
SAW Filter**

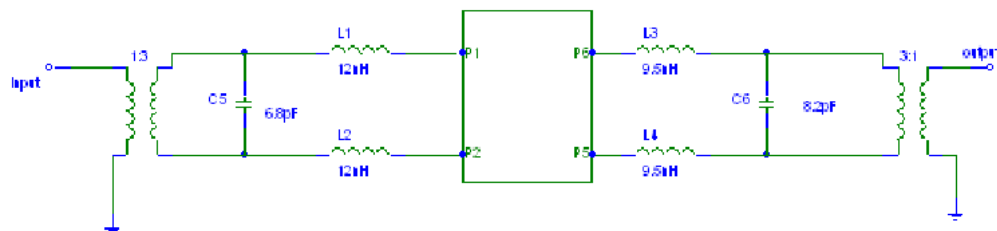


SM3838-8

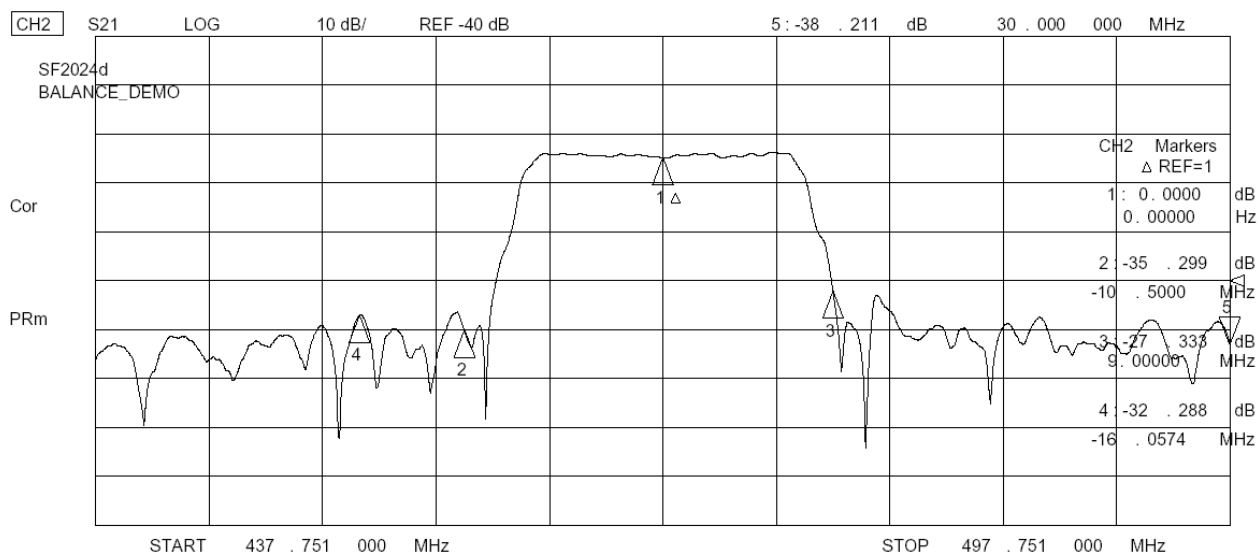
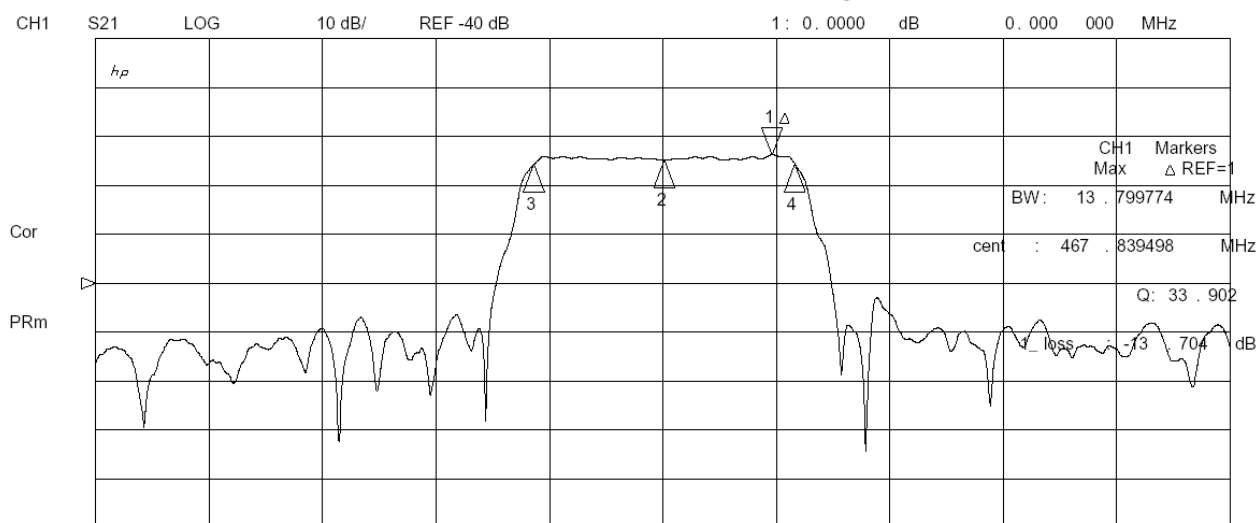
 **CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

NOTES:

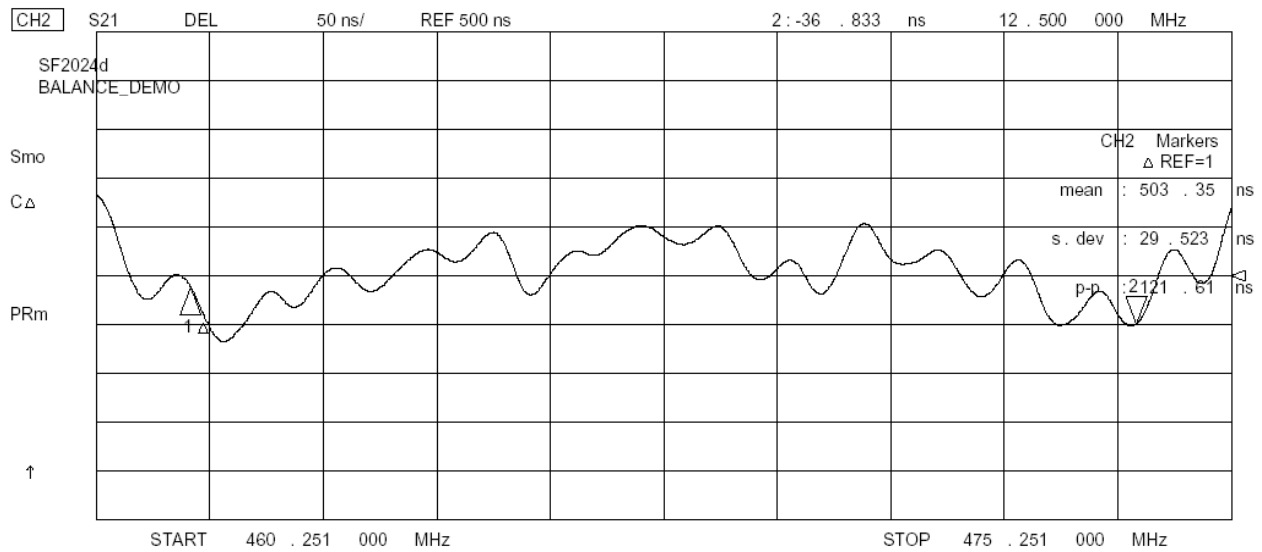
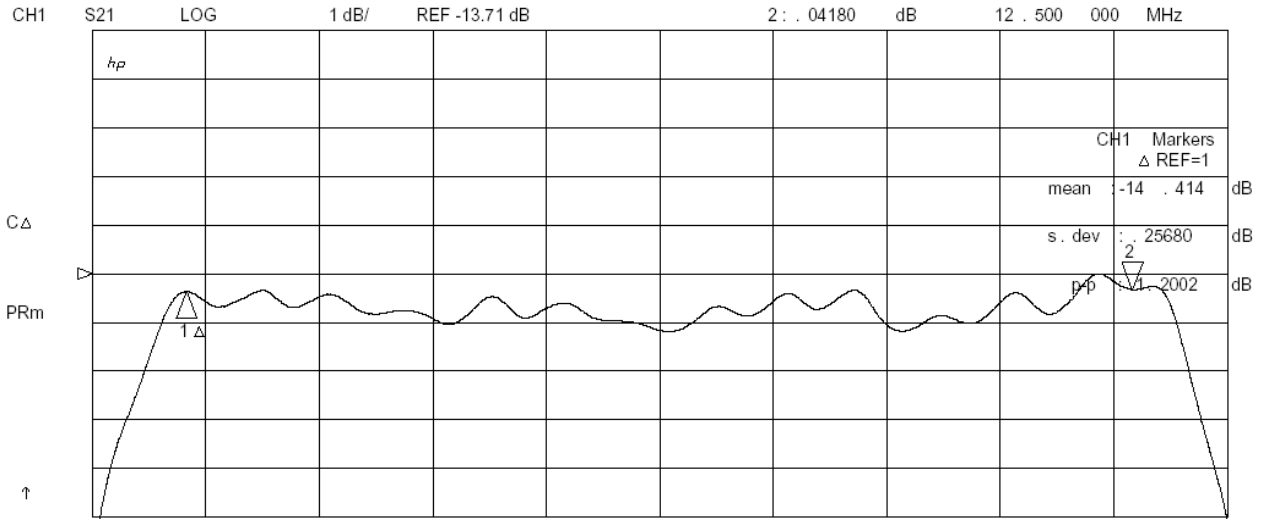
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.



29 Aug 2005 12:18:12



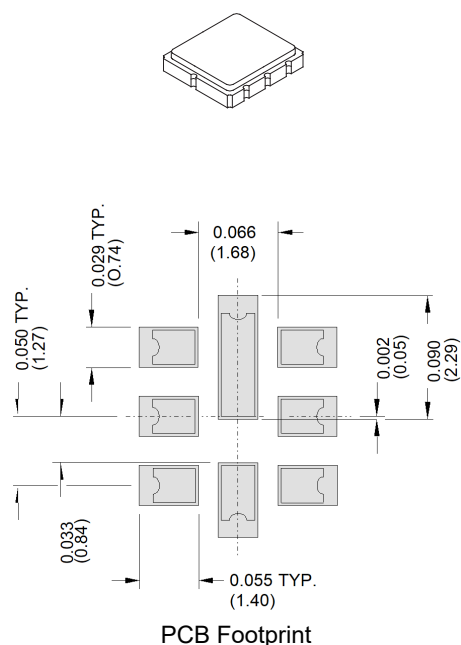
29 Aug 2005 12:21:47



SM3838-8 Case

8-Terminal Ceramic Surface-Mount Case

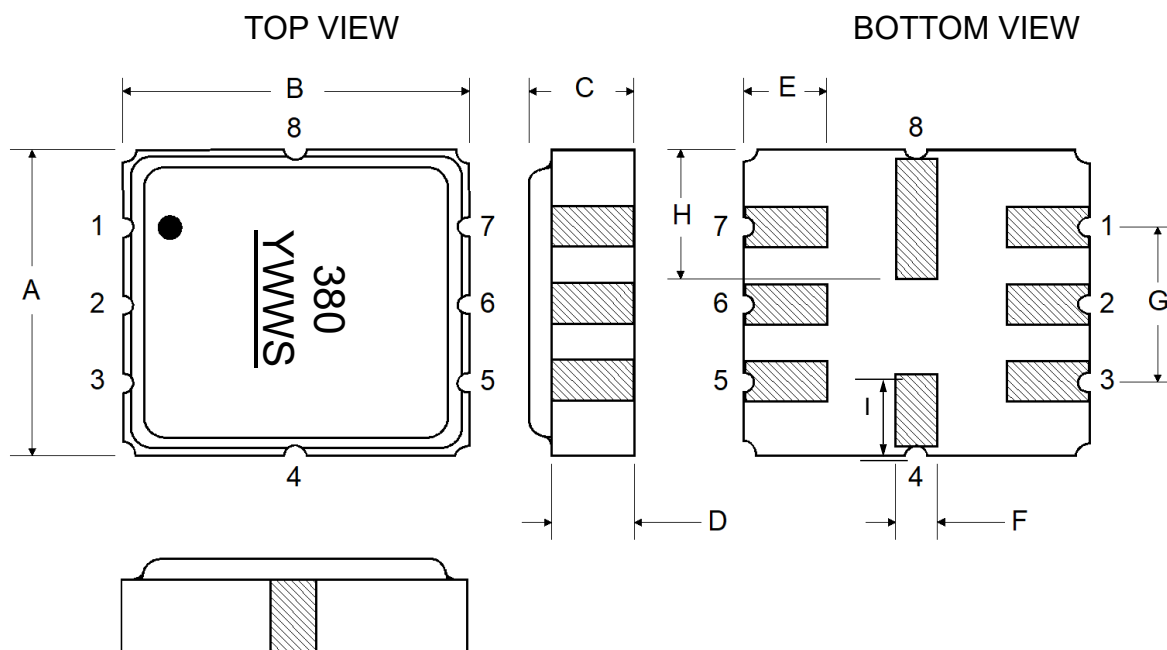
3.8 X 3.8 mm Nominal Footprint



Case Dimensions						
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.6	3.8	4.0	0.142	0.150	0.157
B	3.6	3.8	4.0	0.142	0.150	0.157
C	1.05	1.20	1.35	0.041	0.047	0.053
D	0.95	1.10	1.25	0.037	0.043	0.049
E	0.90	1.00	1.10	0.035	0.040	0.043
F	0.50	0.60	0.70	0.020	0.024	0.028
G	2.39	2.54	2.69	0.090	0.100	0.110
H	1.40	1.75	2.05	0.055	0.069	0.080
I	0.90	1.00	1.10	0.035	0.040	0.043

Electrical Connections		
	Connection	Terminals
Port 1	Differential Input	1, 2
Port 2	Differential Output	5, 6
	Ground	All Others
Single Ended Operation		Return is Ground
Differential Operation		Return is Hot
Dot Indicates Pin 1		

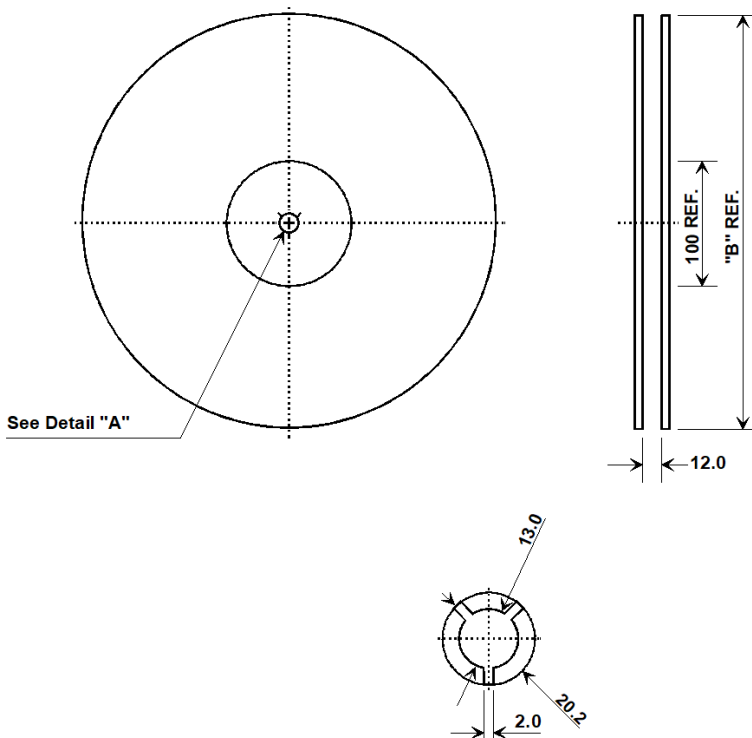
Materials	
Solder Pad Termination	Au plating 30 - 60 ulnches (76.2-152 uM) over 80-200 ulnches (203-508 uM) Ni.
Lid	Fe-Ni-Co Alloy Electroless Nickel Plate (8-11% Phosphorus) 100-200 ulnches Thick
Body	Al ₂ O ₃ Ceramic



Tape and Reel Specifications

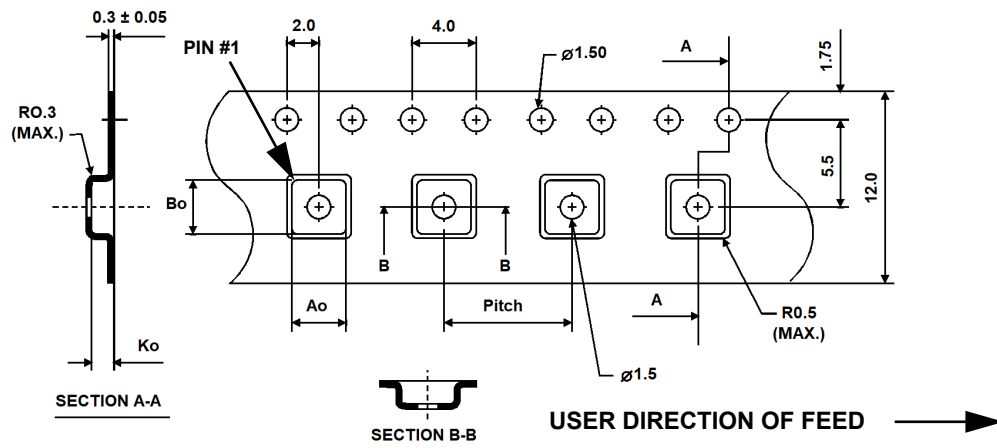
Tape and Reel Standard per ANSI/EIA-481

"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.

