BSFSE-246M-JAAT – SAW Filter

bliley technologies

FEATURES

- ✓ SMD Consturction
- ✓ Standard 5x7mm Package
- ✓ RoHS Compliant

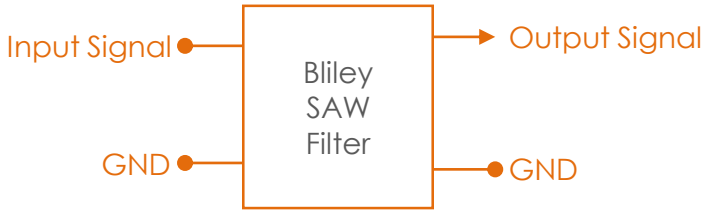
Surface Acoustic Wave Filter

#blileytakesyoufurther

Description

Bliley Surface Acoustic Wave (SAW) filters use Inter-Digital Transducers (IDTs) which enable highly miniaturized filters that can be used for Radio Frequency (RF) signal processing. Bliley rigorous Quality Control Standards provides the framework to provide consistent lot to lot product performance. Bliley SAW Filters are utilized in applications consisting of: Avionics, Instrumentation, Military, SATCOM and DATACOM.

Block Diagram



Part Number Configuration

BSFSE – 246 M – J A A T

Center Frequency	Bandwidth	Operating Temperature	Termination Impedance
246 MHz	J: ± 0.1MHz	A: 0°C to +70°C	A: 50Ω

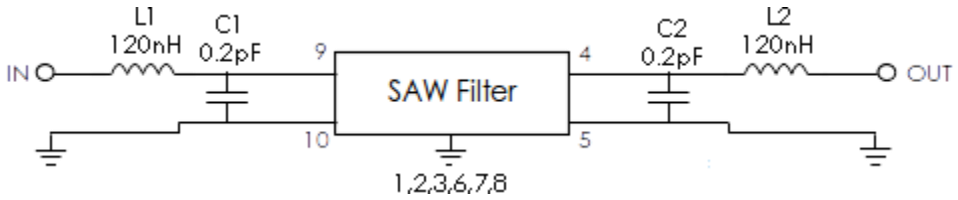
Performance Specifications

Parameter	Conditions	Values			Unit
General		MIN	TYP	MAX	
Center Frequency			246		MHz
Bandwidth			0.1		MHz
Input Power			10	15	dBm
Insertion Loss	In passband		4.1	6.5	dB
Passband Ripple	In passband		0.35	2.0	dB
Group Delay Ripple	In Passband		1.0	3.0	µs
Attenuation	Fc -25 to Fc -1.6	50	65		dB
	Fc -1.6 to Fc -0.6	32	60		dB
	Fc -0.6 to Fc -0.4	20	55		dB
	Fc +0.4 to Fc +0.6	20	55		dB
	Fc +0.6 to Fc +1.6	32	60		dB
	Fc +1.6 to Fc +25	50	60		
Termination Impedance (Source and Load)	Zin = Zout	47.5	50	52.5	Ω

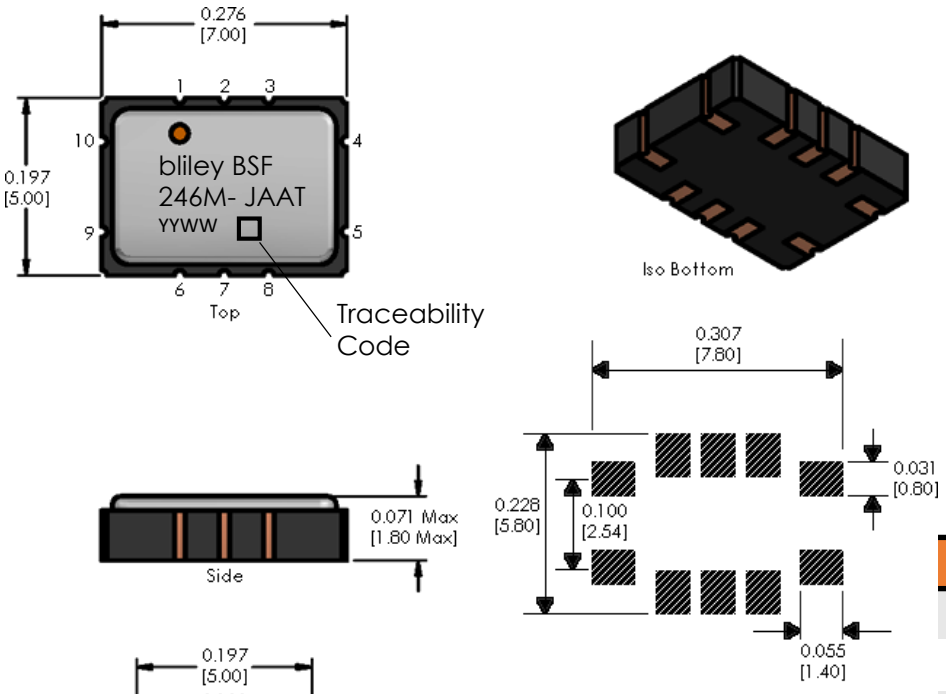
Environmental Compliance

Parameter	Conditions	Values			Unit
		MIN	TYP	MAX	
Operating Temp Range		0		+70	°C
Storage Temp Range		-40		+85	°C
Shock	MIL-STD-202 Method 213 Test Condition A				
Vibration	MIL-STD-202 Method 214 Test Condition 1C				
Thermal Shock	MILD-STD-202 Method 107 Test Condition A-1				
Moisture Resistance	MIL-STD-202 Method 106 Test Condition C				

Measurement Circuit



Physical Specifications



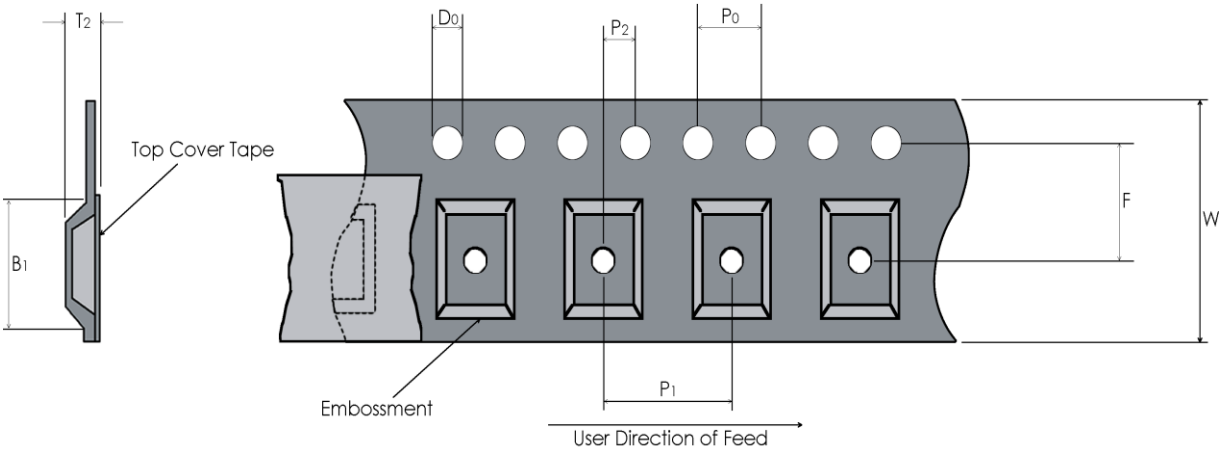
Tolerances (mm) .X = ± 0.5, .XX = ±0.2 unless otherwise specified

Pin Connections	
1	Ground
2	Ground
3	Ground
4	Output
5	Balance output or output ground
6	Ground
7	Ground
8	Ground
9	Input
10	Balance input or input ground

Notes:

Tape and Reel

Embosed Carrier Dimensions (8mm, 12mm, 16mm, 24mm Tape Only)



Tape Dimensions (mm)								Reel Dimensions (mm)	
W	F	Do	Po	P1	P2	B1	T2	Outside Dia.	Parts / Reel
16	7.6	1.5	4.0	8	2.0	7.3	1.9	330	3000

Recommended Reflow Profile

Reflow Profile: in accordance to IPC/JEDEC J-STD-020 (Latest Revision)

Additional Notes:

- This part has been designed for pick and place reflow soldering
- This part may be reflowed once
- This part should not be reflowed in the inverted position

Packaging

Packaging: All packaging must conform to ESD Controls detailed in ANSI/ESD S20.20 (Latest Revision)