BSFSD-2332M5-EPAT – SAW Filter

bliley technologies

FEATURES

- ✓ Extended operating range (-40 to 105°C)
- ✓ SMD Construction
- ✓ Standard 3x3mm Package
- ✓ RoHS Compliant

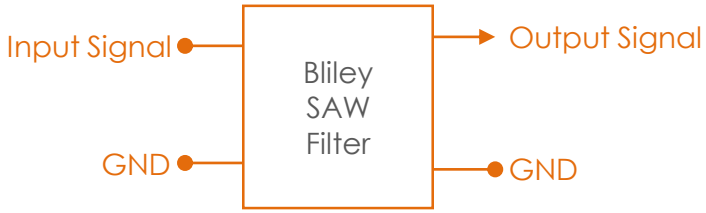
Surface Acoustic Wave Filter

#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

BSFSD – 2332 M – E P A T

Center Frequency	Bandwidth	Operating Temperature	Termination Impedance
2332.5 MHz	E: ±25 MHz	P: -40°C to +105°C	A: 50Ω

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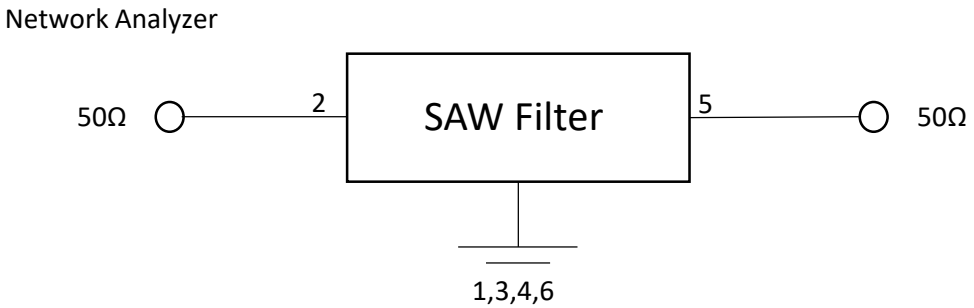
Performance Specifications

Parameter	Conditions	Values			Unit
General		MIN	TYP	MAX	
Center Frequency			2332.5		MHz
Bandwidth	@3dB	25		90	MHz
DC Voltage				3.0	Vdc
Insertion Loss	2320-2345 MHz		1.6	3.2	dB
Amplitude Ripple	2320-2332.5 MHz		0.2	0.6	dB
	2332.5-2345 MHz		0.4	0.9	dB
Passband Ripple	2320-2345 MHz		0.4	1.1	dB
S11 and S22 Return Loss		10	14		dB
S11 and S22 VSWR			1.4	2.0	
Attenuation	Reference Level from Min Insertion Loss: DC-2175 MHz	30	35		dB
	Reference Level from Min Insertion Loss: 2175-2227 MHz	30	35		dB
	Reference Level from Min Insertion Loss: 2400-2570 MHz	30	40		dB
	Reference Level from Min Insertion Loss: 2570-4200 MHz	30	46		dB
Termination Impedance (Source and Load)	Zin = Zout	47.5	50	52.5	Ω
Input Power			10	15	dBm
Temperature Coefficient			-36		ppm/°C

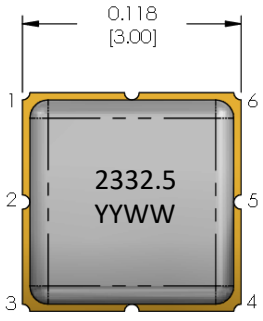
Environmental Compliance

Parameter	Conditions	Values			Unit
		MIN	TYP	MAX	
Operating Temp Range		-40		+105	°C
Storage Temp Range		-40		+105	°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				
Altitude	Mean Sea Level			50,000	ft
Moisture Resistance	MIL-STD-202 Method 106 Test Condition C	90%		98%	RH

Measurement Circuit

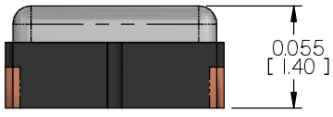


Physical Specifications

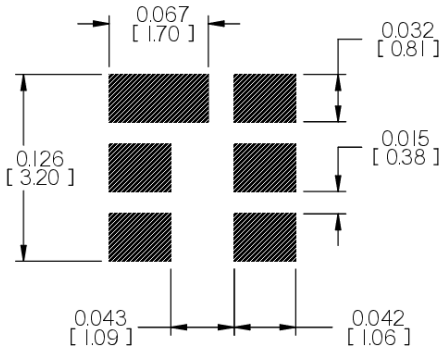


Top

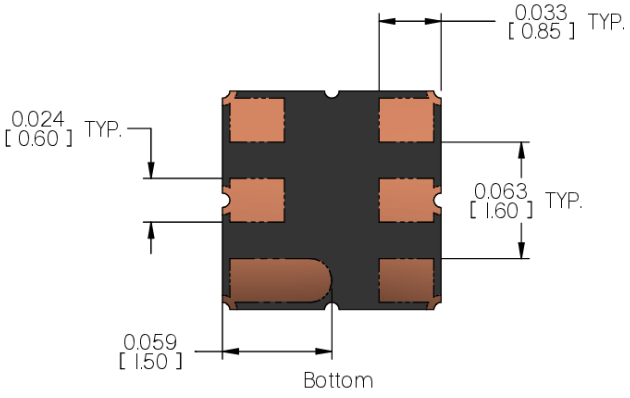
Iso Bottom



Side



Recommended Landing Pattern



Bottom

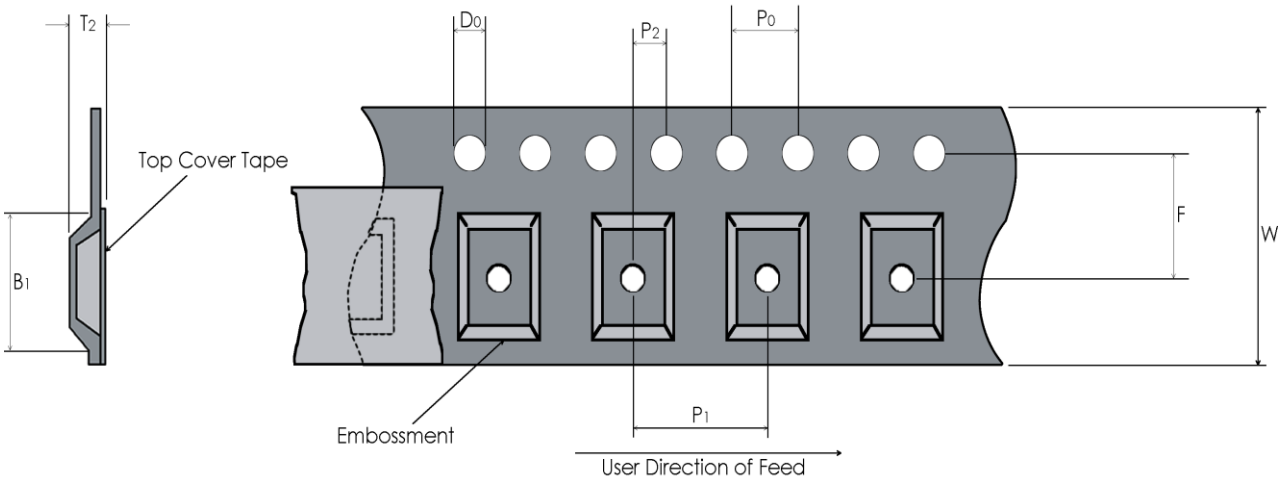
Pin Connections	
1	Ground
2	Input
3	Ground
4	Ground
5	Output
6	Ground

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

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
12	5.5	1.5	4	8	2	3.3	1.6	330	1000

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)