BSFSF-2436M-RVAT – SAW Filter

bliley technologies

FEATURES

✓ Extended operating range (-30° to 85°C)
✓ Surface mount package
✓ ROHS Compliant

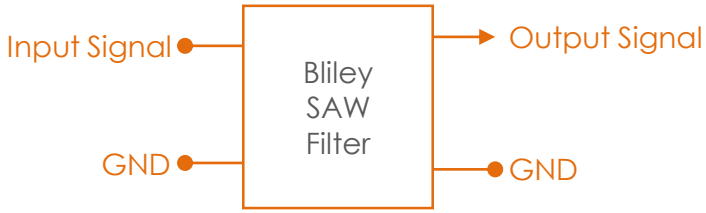
Surface Acoustical Wave Filter

#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

BSFSF – 2436M – R V A T

Center Frequency	Bandwidth	Operating Temperature	Termination Impedance
2436MHz	V: ±36MHz	V: -30°C to +85°C	A: 50Ω

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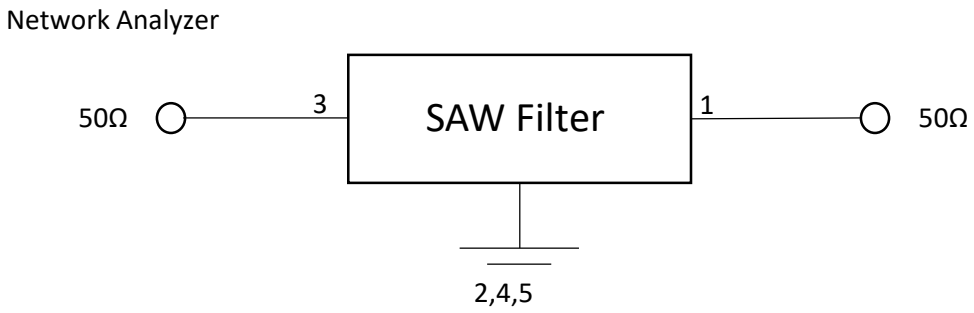
Performance Specifications

Parameter	Conditions	Values			Unit
General		MIN	TYP	MAX	
Center Frequency			2436		MHz
Bandwidth	@-3dB		±36		MHz
Amplitude Variation	In passband		2	3.3	dB p-p
Insertion Loss	In passband		3.5	4.4	dB
Group Delay Variation	In Passband		12		nSec
Attenuation	Reference Level from 0 dB: DC-960 MHz	25	35		dB
	Reference Level from 0 dB: 960-1580 MHz	25	33		dB
	Reference Level from 0 dB: 1710-1990 MHz	25	34		dB
	Reference Level from 0 dB: 2110-2170 MHz	28	37		dB
	Reference Level from 0 dB: 2496-2690 MHz @ 25°C	30	40		dB
	Reference Level from 0 dB: 2496-2690 MHz	10	20		dB
	Reference Level from 0 dB: 2690-4800 MHz	25	44		dB
	Reference Level from 0 dB: 4800-5000 MHz	20	36		dB
	Reference Level from 0 dB: 5000-6000 MHz	15	31		dB
VSWR	2400-2472MHz		2	3.3	
Temperature Coefficient			-36		ppm/°C
Termination Impedance (Source and Load)	Zin = Zout	47.5	50	52.5	Ω
Input Power				10	dBm

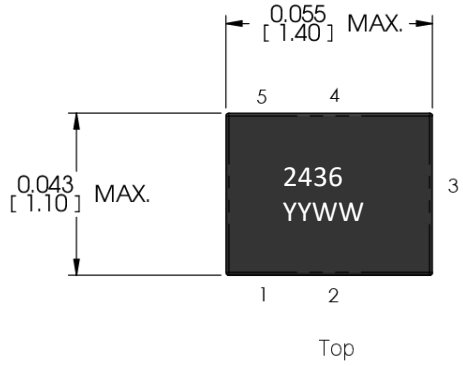
Environmental Compliance

Parameter	Conditions	Values			Unit
		MIN	TYP	MAX	
Operating Temp Range		-30		+85	°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				
Altitude	Mean Sea Level	50,000			ft
Moisture Resistance	MIL-STD-202 Method 106 Test Condition C	90		98	%RH

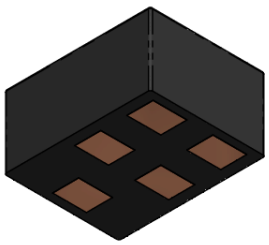
Measurement Circuit



Physical Specifications

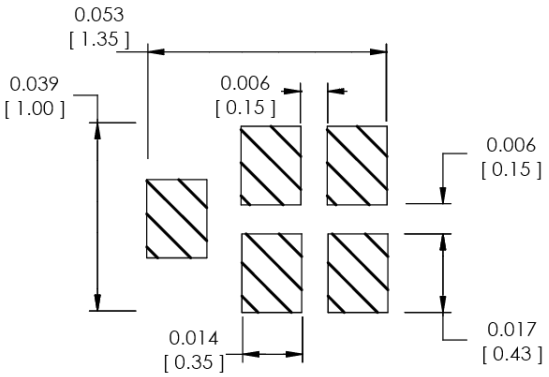


Top

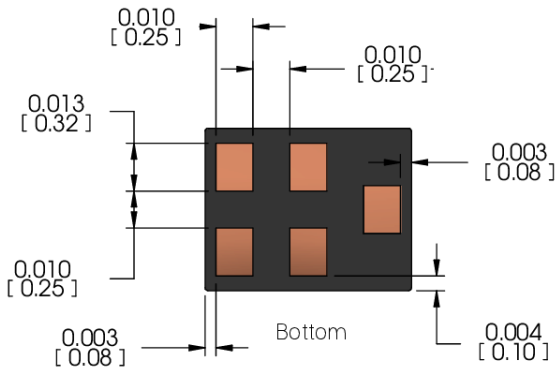


Iso Bottom

Side



Landing Pads



Bottom

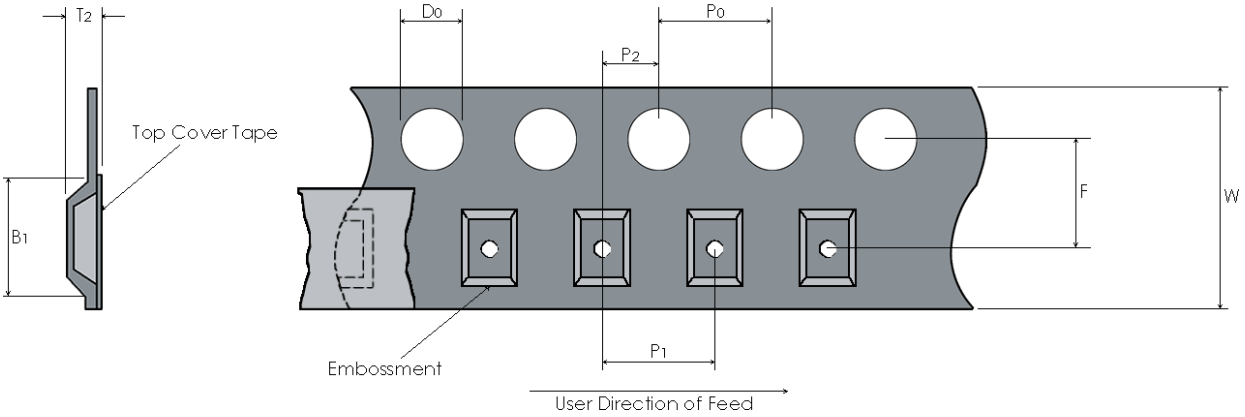
Pin Connections	
1	Output
2	Ground
3	Input
4	Ground
5	Ground

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

Notes:

Tape and Reel

Embossed 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
8	3.5	1.5	4	4	2	1.73	0.75	180	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)