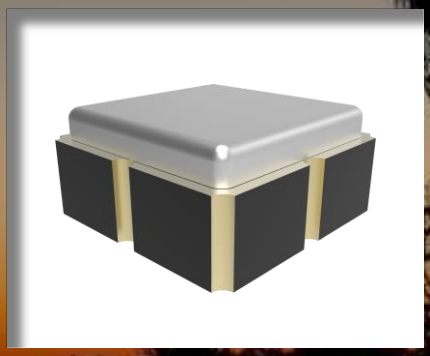
BSFSD-915M-SCAT – SAW Filter



FEATURES

- ✓ Extended operating range (-40° to 85°C)
- ✓ SMD Construction
- ✓ Standard 3x3mm Package
- ✓ ROHS Compliant

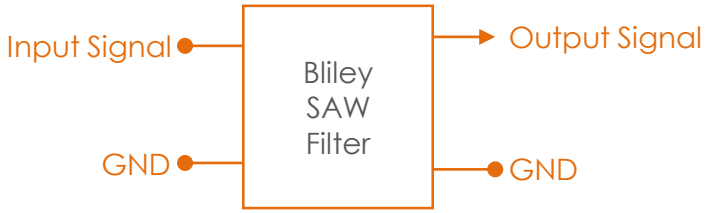
Surface Acoustic Wave Filter

#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 – 915 M – S C A T

Center Frequency	Bandwidth	Operating Temperature	Termination Impedance
915MHz	S: Special ±26MHz	C: -40°C to +85°C	A: 50Ω

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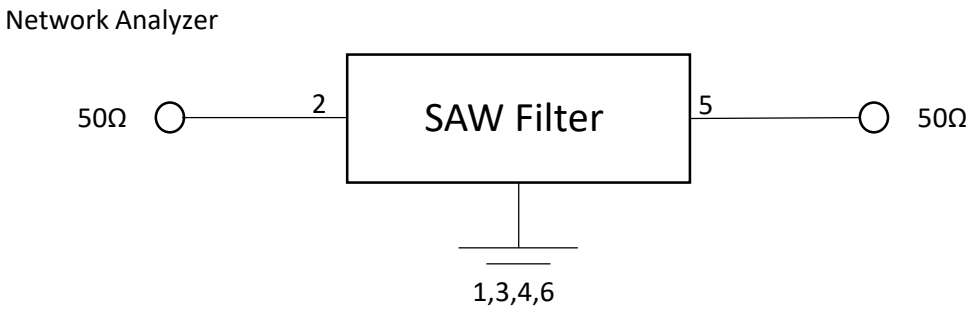
Performance Specifications

Parameter	Conditions	Values			Unit
General		MIN	TYP	MAX	
Center Frequency			915		MHz
Bandwidth		26		42	MHz
Insertion Loss	In passband		2.2	3.5	dB
Amplitude Ripple	In passband		0.6	2.0	dB
VSWR	In Passband		1.6	2.3	
Attenuation	Reference Level from 0 dB: DC-800 MHz	50	63		dB
	Reference Level from 0 dB: 800-880 MHz	40	48		dB
	Reference Level from 0 dB: 960-1080 MHz	32	39		dB
	Reference Level from 0 dB: 1080-1500 MHz	45	65		dB
	Reference Level from 0 dB: 1500-3000 MHz	22	28		dB
Termination Impedance (Source and Load)	Zin = Zout	47.5	50	52.5	Ω
Temperature Coefficient			-36		ppm/°C
Input Power Level				15	dBm
DC Voltage				5	V

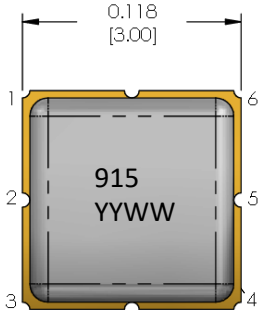
Environmental Compliance

Parameter	Conditions	Values			Unit
		MIN	TYP	MAX	
Operating Temp Range		-40		+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	Above sea level	50,000			ft
Moisture Resistance	MIL-STD-202 Method 106 Test Condition C	90%		98%	RH
Terminal Strength	MIL-STD-202 Method 211 Test Condition C ½ Pound Load				

Measurement Circuit



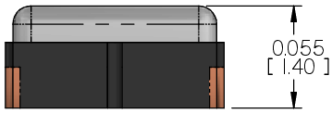
Physical Specifications



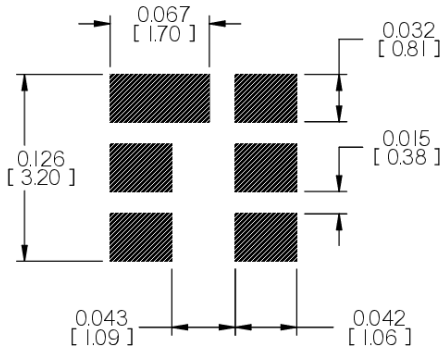
Top

Traceability Code

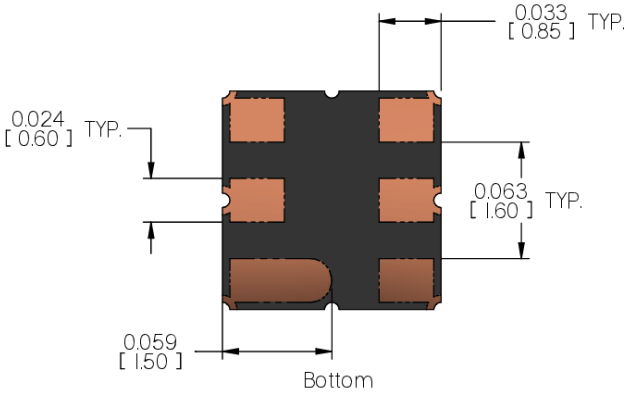
Iso Bottom



Side



Recommended Landing Pattern



Bottom

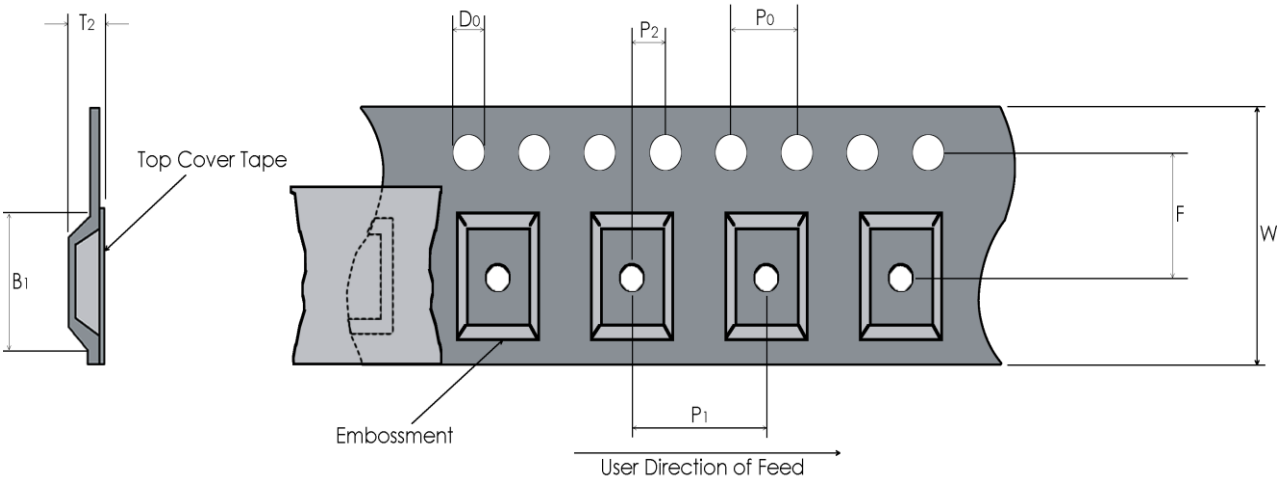
Pin Connections	
1	Ground
2	Input
3	Ground
4	Ground
5	Output
6	Ground

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	1.4	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)