#### BSFSA-81M-SBAT – SAW Filter



### **FEATURES**

Extended operating range (-20° to 70°C)

✓ Surface mount package

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✓ ROHS Compliant

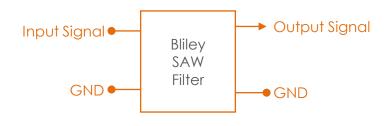
### Surface Acoustical Wave Filter

#blileytakesyoufurther

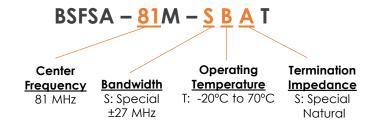
## **Description**

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**



#### BSFSA-81M-SBAT - SAW Filter



# **Performance Specifications**

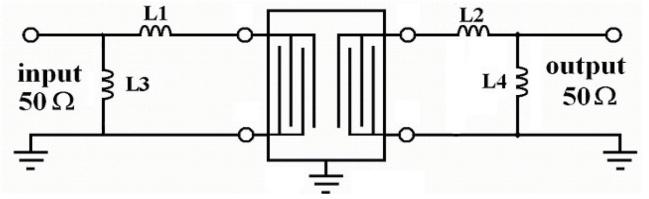
Parameter	Values			Unit	
General		MIN	TYP	MAX	
Center Frequency	Fundamental		81		MHz
Bandwidth	@3 dB	±27			MHz
Amplitude Variation	In Passband		1.0	3.0	dB p-p
Insertion Loss	In passband (± 30% of BW)		19.7	25	dB
Attenuation	42 MHz	10	46		dB
	114 MHz	10	40		dB
Input Power	Operational			10	dBm
System Impedance	Natural				Ω
Temperature Coefficient			-76		ppm/K
Moisture Sensitivity level	1				



# **Environmental Compliance**

Parameter	Conditions		Values		Unit
		MIN	TYP	MAX	
Operating Temp Range		-20		+70	°C
Storage Temp Range		-40		+85	°C
Shock	MIL-STD-202 Method 213 Test Condition A				
Thermal Shock	MILD-STD-202 Method 107 Test Condition A-1				
Seal	MIL-STD-883 Method 1014.11 Test Conditions A2 & C1				

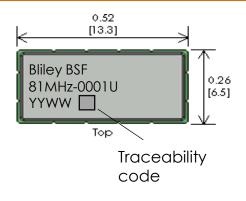
# **Measurement Circuit**



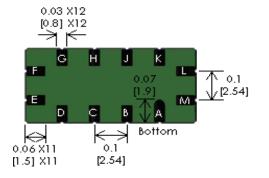
L1=27nH, L2=27nH, L3=180nH, L4=180nH

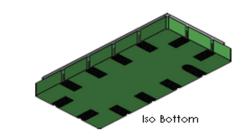


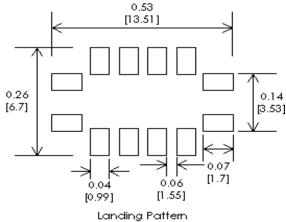
# **Physical Specifications**











Pin Connections							
Α	Ground	G	Ground				
В	Ground	Н	Ground				
С	Ground	J	Ground				
D	Ground	K	Ground				
Е	Output	L	Input				
F	Output Ground	М	Input Ground				

Tolerances (mm)  $.X = \pm 0.15$ ,  $.XX = \pm 0.20$  unless otherwise specified







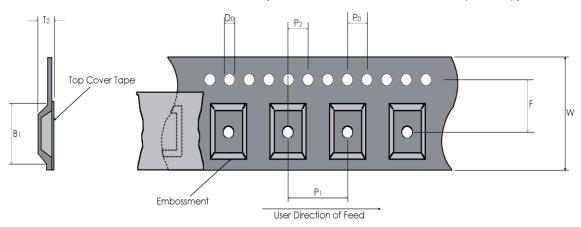


Notes:



## Tape and Reel

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



Tape Dimensions (mm) Reel Dimensions (mm)									
W	F	Do	Ро	P1	P2	В1	T2	Outside Dia.	Parts / Reel
24	11.5	1.5	4	12	2	6.96	2.3	178	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 Twice
- 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)