SPECIFICATION

COMMERCIALLY AVAILABLE

SAW BAND PASS
PART NUMBER: SF-20

Caution:
Electrostatic Sensitive Device
Observe Handling Precautions

11/18/15 Changed lead length from 6.0±0.5, to 5.0±0.5

ISSUED / REVISION	ENGINEER APPROVED	DOCUMENT CHECKED	DRAFTSMAN
7/8/2003 **			
10/8/2013 (kn)	10/16/2013 TFG		10/16/2013 GL
11-18-15(kn)			

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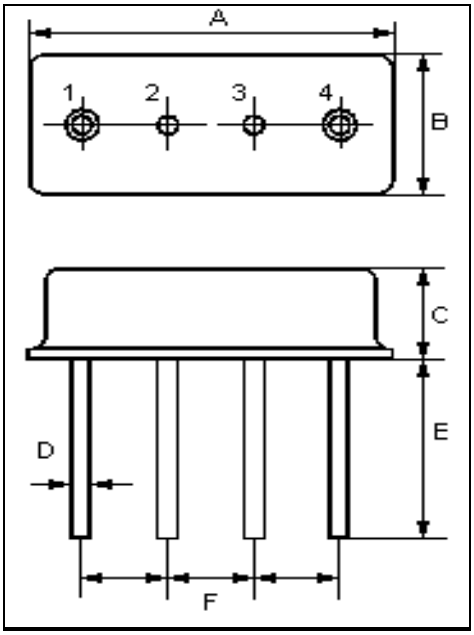
1. Electrical Specifications:

			UNIT	MIN	TYP	MAX
Center Frequency: between 3dB points		f_c	MHz	315.00		
Insertion Loss		I_L	dB	-	3.5	5.5
3dB Pass Band		BW_3	KHz		±300	
3dB Reject Band		BW_3	KHz			±500
VSWR (Ref #2 below) at		f_c				1.2:1
Rejection	at f_c -21.4MHz (image)		dB	40	50	-
	at f_c -10.7MHz (LO)		dB	15	30	-
	Ultimate		dB	-	80	-
Operating Case Temperature		Tc	°C	-35		+85
Turnover Temperature		T o	°C	25	40	55
Turnover Frequency		fo	MHz		fc	
Frequency Temperature Coefficient		F TC	ppm/°C^2		0.032	
Frequency Aging Absolute Value during the First Year		|fA|	ppm/yr		10	
CW RF Power Dissipation			dBm	+10		
DC Voltage Between Any Two Pins			VDC	±30		
Case Temperature			°C	-40 to +85		

1. The Frequency f_c is defined as the midpoint between the 3dB frequencies.
2. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture that is connected to a 50Ω test system with VSWR ≤1.2:1. The test fixture L and C are adjusted for minimum insertion loss at the filter center frequency, f_c. Note that insertion loss, bandwidth, and passband shape are dependent on the impedance matching component values and quality.
3. Unless noted otherwise, specifications apply over the entire specified operating temperature range.
4. Frequency aging is the change in f_c with time and is specified at +65°C or less. Aging may exceed the specification for prolonged temperatures above +65°C. Typically, aging is greatest the first year after manufacture, decreasing in subsequent years.
5. Turnover Temperature, T_o, is the temperature of maximum (or turnover) frequency, f_o. The nominal frequency at any case temperature, T_c, may be calculated from $f=f_o [1\text{-}FTC (T_o – T_c)^2]$.
6. The specifications of this device are based on the test circuit shown above and subject to change or obsolescence without notice.
7. All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.
8. Our liability is only assumed for the Surface Acoustic Wave (SAW) component(s) per se, not for applications, processes and circuits implemented within components or assemblies.

2. Dimension:

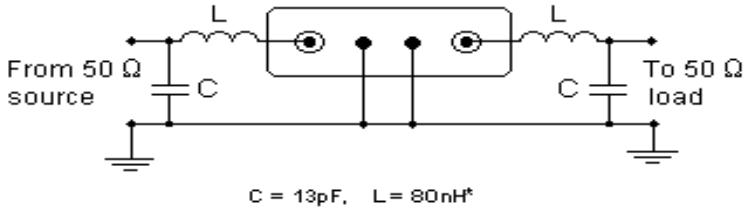


Pin	Connection
1	Input / Output
4	Output / Input
2/3	Case Ground

Dimensions	Data (unit:mm)
A	11.0±0.3
B	4.5±0.3
C	3.1±0.1
D	0.45±0.2
E	5.0±0.5
F	2.54±0.2

Marking:	
315MHz	D/C

Test Circuit



C = 13pF, L= 80nH*

3. Typical Frequency Response: