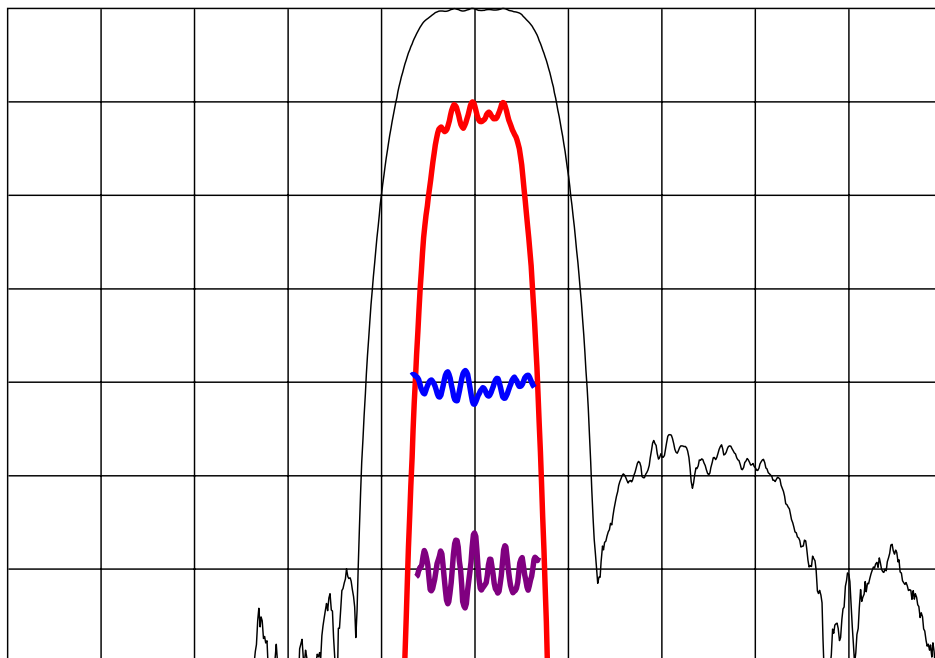


## DESCRIPTION

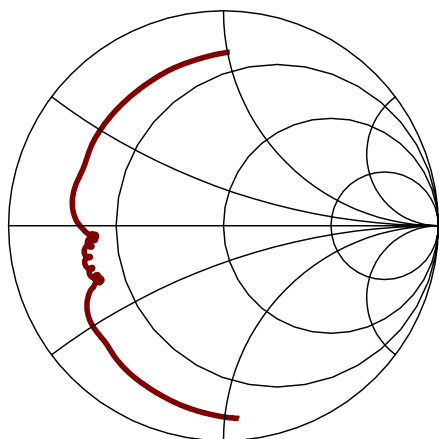
- 92.5 MHz SAW bandpass filter with 1.7 MHz bandwidth.
- 13.3 x 6.5 mm ceramic LCC package.
- RoHS compliant.

## TYPICAL PERFORMANCE

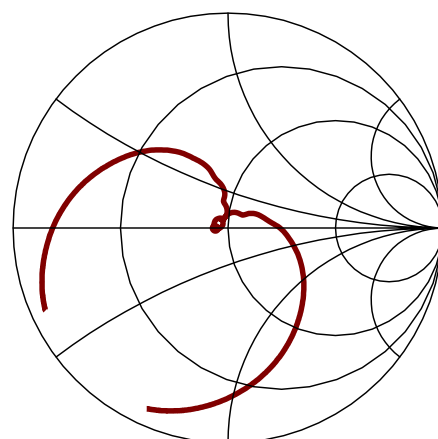


Horizontal: Frequency : 2 MHz/div  
Vertical: Relative Magnitude : 10 dB/div  
Relative Magnitude : 1 dB/div  
Phase Linearity : 5 deg/div  
Group Delay : 100 ns/div

**S11 (82.5-102.5 MHz)**



**S22 (82.5-102.5 MHz)**



## SPECIFICATION

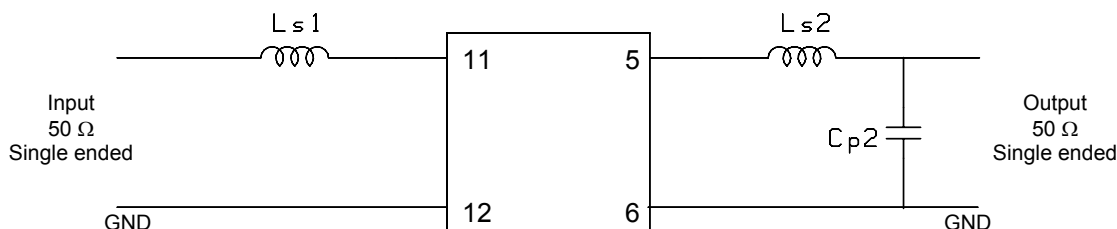
Parameter	Min	Typ	Max	Units
Center Frequency (Fc) <sup>1</sup>	-	92.50	-	MHz
Insertion Loss at 92.5 MHz	17	18.2	22	dB
Amplitude Ripple (91.65 to 93.35 MHz)	-	0.5	0.7	dB p-p
Lower 0.7dB Band Edge Frequency <sup>3</sup>	-	91.57	91.65	MHz
Upper 0.7dB Band Edge Frequency <sup>3</sup>	93.35	93.52	-	MHz
Lower 15dB Band Edge Frequency <sup>3</sup>	90.50	90.63	-	MHz
Upper 15dB Band Edge Frequency <sup>3</sup>	-	94.42	94.50	MHz
Lower 40dB Band Edge Frequency <sup>3</sup>	89.5	90.1	-	MHz
Upper 40dB Band Edge Frequency <sup>3</sup>	-	94.9	95.5	MHz
Lower Sidelobe Attenuation (78-82 MHz)	45	50	-	dB
Upper Sidelobe Attenuation (97.5-122.5 MHz)	45	50	-	dB
Triple Transit Suppression	40	50	-	dB
Group Delay Ripple (91.65 to 93.35 MHz) <sup>2</sup>	-	75	90	ns p-p
System Source and Load Impedance	-	50	-	ohm
Ambient Temperature	-	25	-	°C

- Notes:
1. Center Frequency:  $F_c = (\text{Lower 15dB value} + \text{Upper 15dB value})/2$ .
  2. A smoothing aperture of 150 kHz may be applied to this measurement.
  3. Measured relative to the Insertion Loss Value.

## MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	°C
Operating Temperature Range	10	70	°C
Input Power Level	-	13	dBm

## MATCHING CIRCUIT



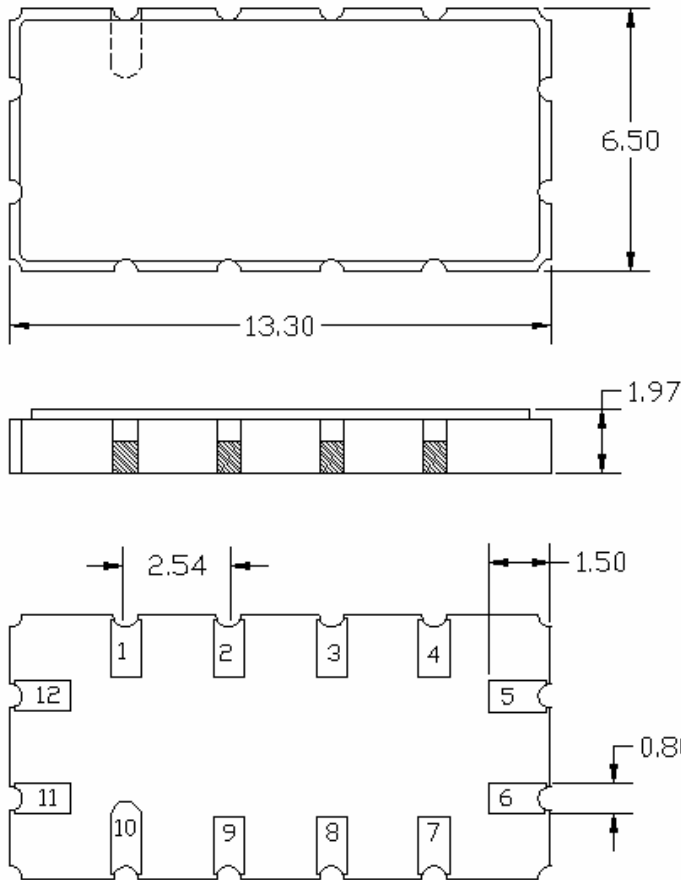
Typical Component Values:       $L_{s1} = 400 \text{ nH}$                        $L_{s2} = 420 \text{ nH}$

$C_{p2} = 56 \text{ pF}$

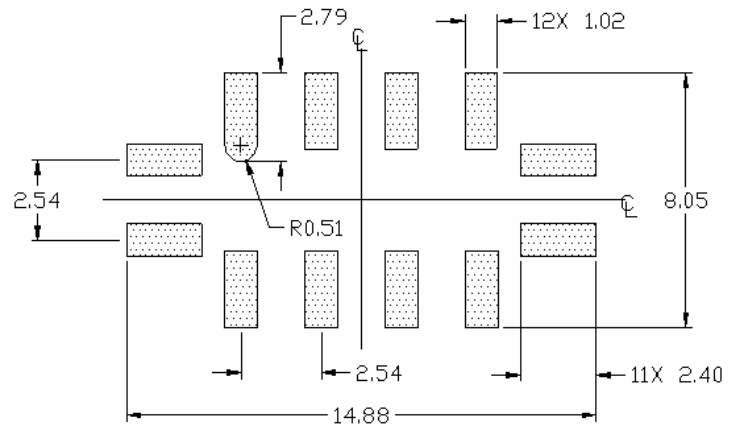
Notes:

1. Recommend  $\pm 2\%$  tolerance matching components. Typical Inductor  $Q=40$ .
2. Values shown are for reference only and may change depending on board layout.

**PACKAGE OUTLINE**



**SUGGESTED FOOTPRINT**



**Units:** mm

Tolerances are typically  $\pm 0.15$  mm except where indicated.

**Pad Configuration:**

- Input: 11
- Input return: 12
- Output: 5
- Output return: 6
- Case Ground: All other pads

Package Material:  
 Body:  $Al_2O_3$  ceramic  
 Lid: Kovar, Ni plated  
 Terminations: Au plating 1  $\mu$ m min, over a 1.3-8.9  $\mu$ m Ni plating

ISO 9001  
Registered

All specifications are believed to be accurate and reliable. However, Spectrum Microwave reserves the right to make changes without notice.  
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