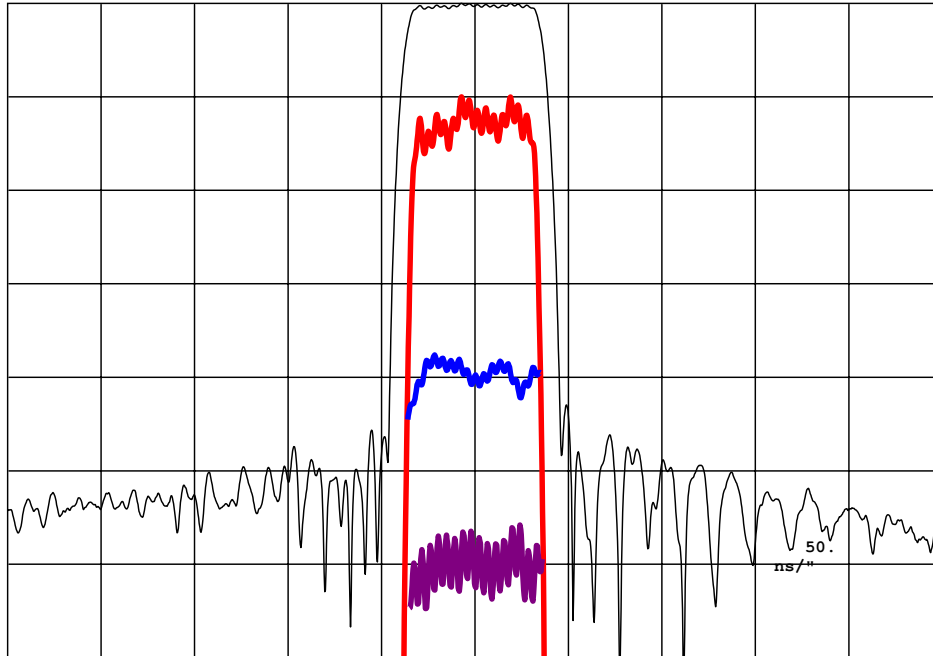


**DESCRIPTION**

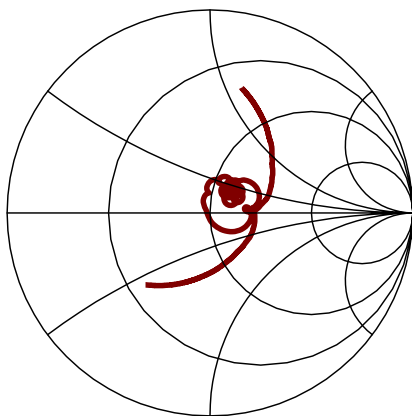
- 426 MHz SAW bandpass filter with 4.9 MHz bandwidth.
- 13.3 x 6.5 mm LCC package.
- RoHS compliant.

**TYPICAL PERFORMANCE**

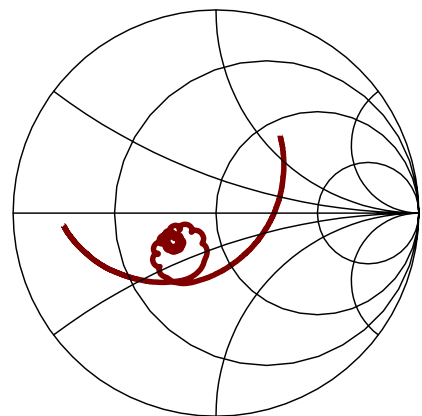


Horizontal: Frequency : 4 MHz/div  
Vertical: Relative Magnitude : 10 dB/div  
Relative Magnitude : 1 dB/div  
Phase Linearity : 10 deg/div  
Group Delay : 100 ns/div

**S11 (406-446 MHz)**



**S22 (406-446 MHz)**



## SPECIFICATION

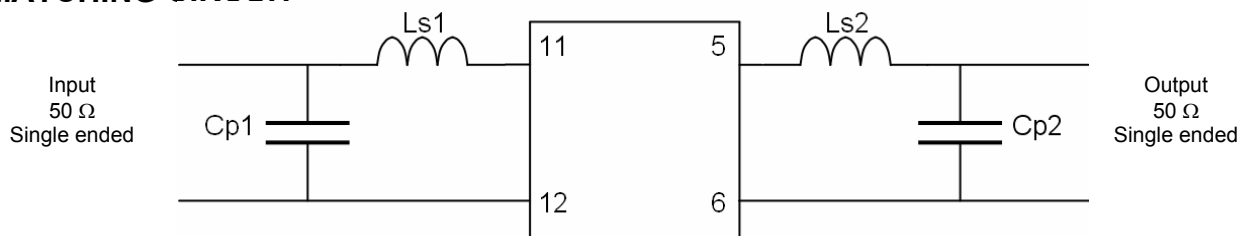
Parameter	Min	Typ	Max	Units
Center Frequency (Fc) <sup>1</sup>	-	426.00	-	MHz
Minimum Insertion Loss	17.3	18.3	19.3	dB
Lower 1 dB Band Edge Point	-	423.36	423.56	MHz
Upper 1 dB Band Edge Point	428.44	428.57	-	MHz
Lower 3 dB Band Edge Point	-	423.13	423.31	MHz
Upper 3 dB Band Edge Point	428.69	428.78	-	MHz
Lower 40 dB Band edge Point	422.13	422.34	-	MHz
Upper 40 dB Band Edge Point	-	429.84	429.92	MHz
Rejection (417.5 to 421.5 MHz)	44	50	-	dB
Rejection (430.7 to 436 MHz)	44	46	-	dB
Rejection (100 to 417.5 MHz)	48	60	-	dB
Rejection (436 to 500 MHz)	48	55	-	dB
Passband Ripple (423.56 to 428.44 MHz)	-	0.65	1	dB
Phase Ripple (423.56 to 428.44 MHz)	-	5	7.5	deg p-p
Group Delay Variation (423.56 to 428.44 MHz) <sup>4</sup>	-	100	120	ns p-p
Triple Transit Suppression	-	40		dB
Source and Load Impedance	-	50		$\Omega$
Ambient Temperature	-	25	-	$^{\circ}\text{C}$

- Notes:
1. Average of the lower and upper 3 dB band edge frequencies.
  2. Specifications apply over operating temperature with filter matched to 50 ohms.
  3. All dB values are measured relative to the minimum insertion loss.
  4. A smoothing aperture of 0.125 MHz is to be used for this measurement.

## MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	$^{\circ}\text{C}$
Operating Temperature Range	10	70	$^{\circ}\text{C}$
Input Power Level	-	13	dBm

## MATCHING CIRCUIT



Typical component values:

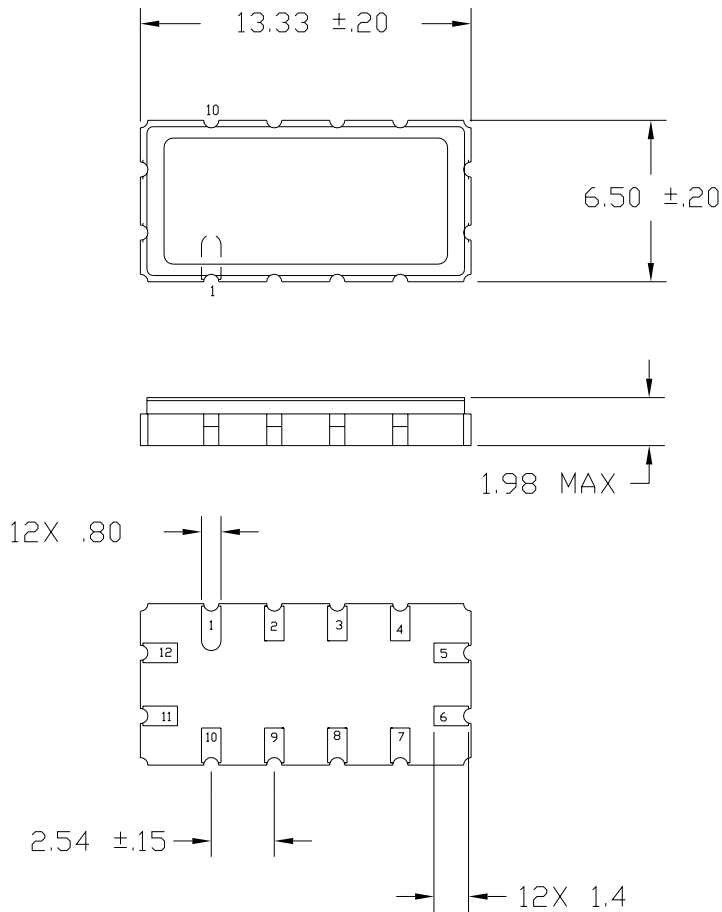
$$Ls1 = 18 \text{ nH} \quad Ls2 = 15 \text{ nH}$$

$$Cp1 = 19 \text{ pF} \quad Cp2 = 22 \text{ pF}$$

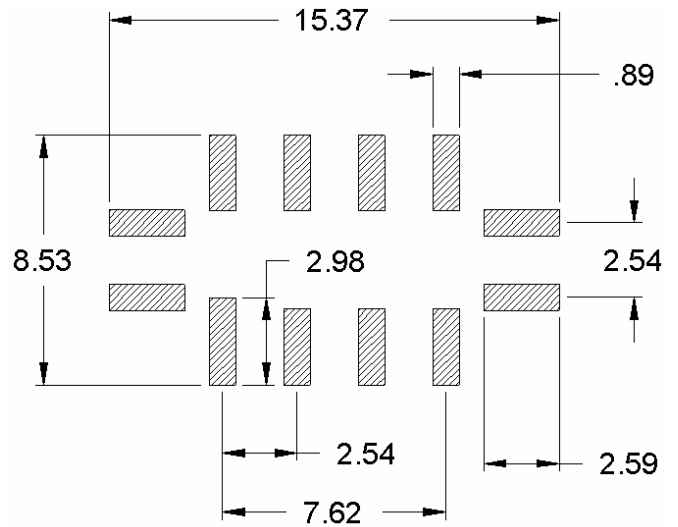
Notes:

- 1) Recommend 2% tolerance matching components. Typical inductor Q=40.
- 2) Tuning values shown are for reference only. Optimum values may change depending upon board layout.

**PACKAGE OUTLINE**



**SUGGESTED FOOTPRINT**



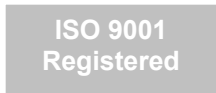
**Units:** mm

Tolerances are ±0.15 mm except where indicated.

**Pad Configuration:**

Input: 11  
Input return: 12  
Output: 5  
Output return: 6  
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



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