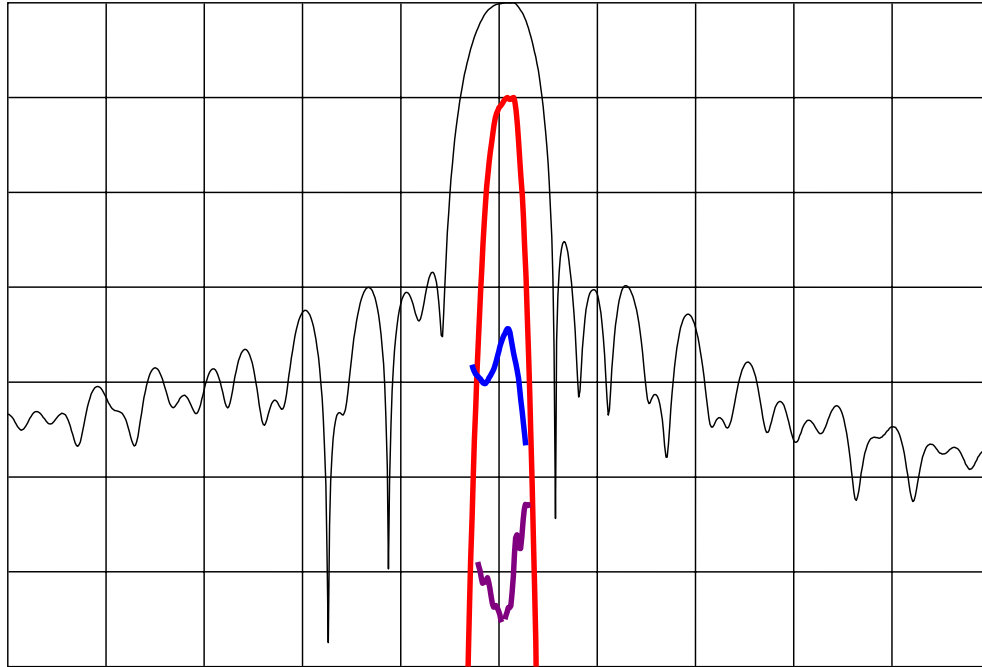


## DESCRIPTION

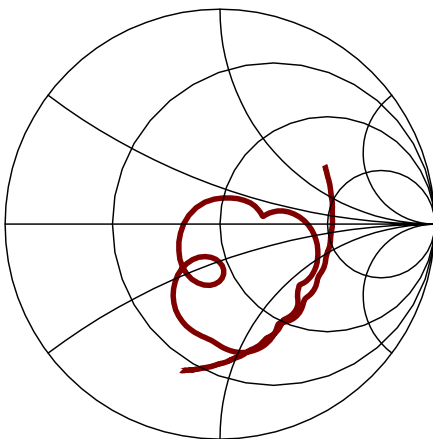
- 266.667 MHz SAW bandpass filter with 0.27 MHz bandwidth.
- 7 x 5 mm LCC package.
- RoHS compliant.

## TYPICAL PERFORMANCE

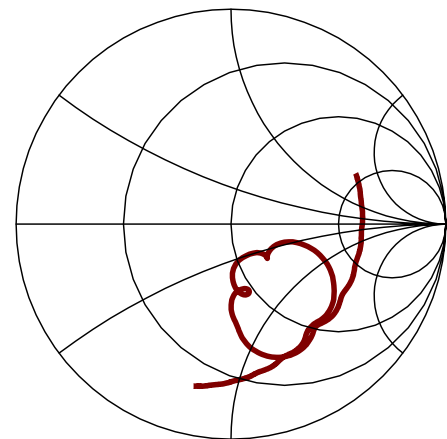


Horizontal: Frequency : 2 MHz/div  
 Vertical from Top: Relative Magnitude : 10 dB/div  
 Relative magnitude : 1 dB/div  
 Phase Linearity : 10 deg/div  
 Group Delay Deviation : 150 ns/div

**S11 (256.667-276.667 MHz)**



**S22 (256.667-276.667 MHz)**



## SPECIFICATION

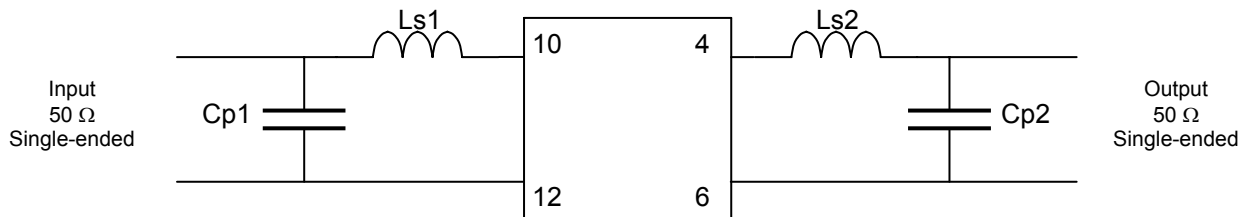
Parameter	Min	Typ	Max	Units
Nominal Center frequency (Fc, 8dB points)	-	266.667	-	MHz
Insertion Loss	-	6.2	7.5	dB
Lower 1 dB band Edge	-	266.515	266.532	MHz
Upper 1 dB Band Edge	266.802	266.825	-	MHz
Amplitude Ripple over Fc +/-135 kHz	-	0.7	1	dB p-p
Phase Ripple (Fc +/- 135 kHz)	-	3	10	deg p-p
Group delay Ripple (Fc +/- 135 kHz)	-	200	300	ns p-p
Absolute Delay	-	0.75	-	us
Lower 20 dB Band Edge	265.317	265.34	-	MHz
Upper 20 dB Band Edge	-	267.98	268.017	MHz
Rejection (253.34 to 265.317 MHz) <sup>2</sup>	20	26	-	dB
Rejection (268.017 to 280 MHz) <sup>2</sup>	20	27	-	dB
Rejection (280 MHz to 1.5*Fc MHz) <sup>2</sup>	30	35	-	dB
Rejection (0.5*Fc to 253.34 MHz) <sup>2</sup>	30	34	-	dB
Source and Load Impedance	-	50	-	$\Omega$

- Notes:
1. Unless noted otherwise, all specifications apply over the operating temperature with filter matched to 50 ohms and measured with a 50 ohm network analyzer.
  2. Rejection levels are measured from the minimum loss in the passband.
  3. All frequency specifications are referenced to the nominal center frequency, Fc.

## MAXIMUM RATINGS

Parameter	Min	Typ	Max	Units
Storage Temperature Range	-40	25	85	$^{\circ}\text{C}$
Operating Temperature Range	15	25	35	$^{\circ}\text{C}$
Input Power Level	-	0	10	dBm

## MATCHING CIRCUIT



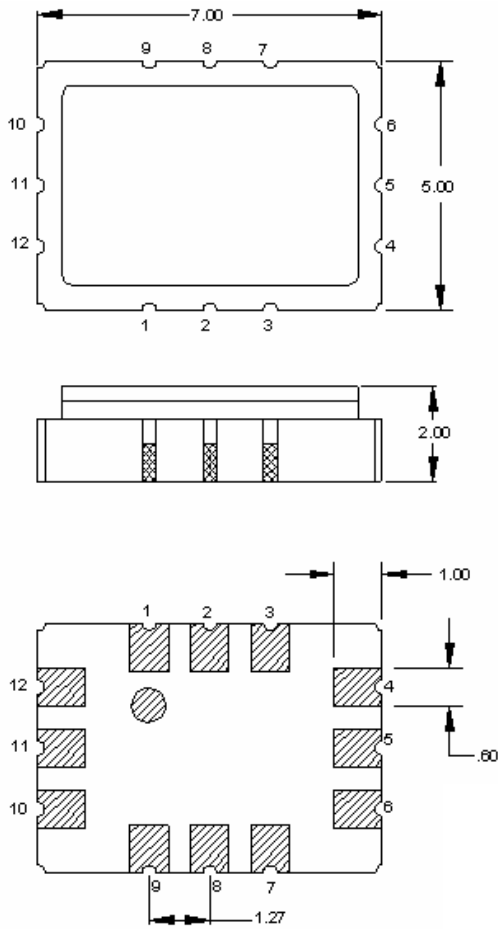
Typical component values:

$$\begin{array}{l} \text{Ls1} = 36 \text{ nH} \\ \text{Cp1} = 22 \text{ pF} \end{array} \qquad \begin{array}{l} \text{Ls2} = 47 \text{ nH} \\ \text{Cp2} = 22 \text{ pF} \end{array}$$

Notes:

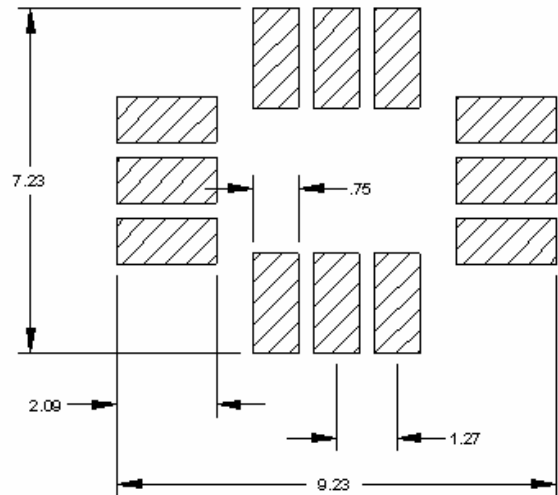
1. Recommend use of 2% tolerance matching components. Inductor Q=45.
2. Component values are for reference only and may change depending on board layout.

**PACKAGE OUTLINE**



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

**SUGGESTED FOOTPRINT**



Units: mm

Tolerances are  $\pm 0.15$  mm except where indicated and for the overall length and width, which are nominal values.

**Pad Configuration:**

Input:	12
Input return:	10
Output:	6
Output return:	4
Ground :	all other pads

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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