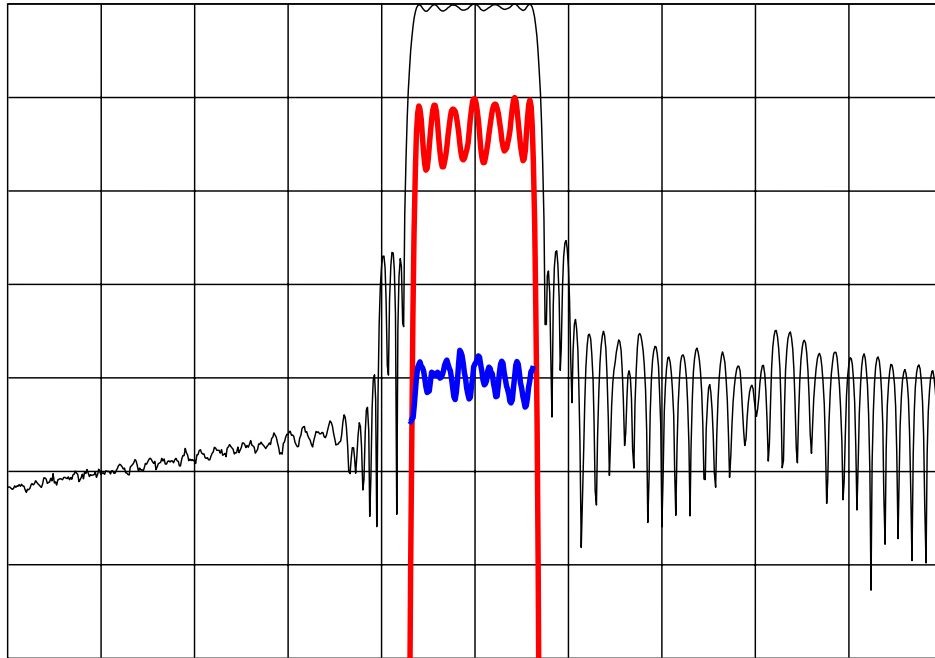


## DESCRIPTION

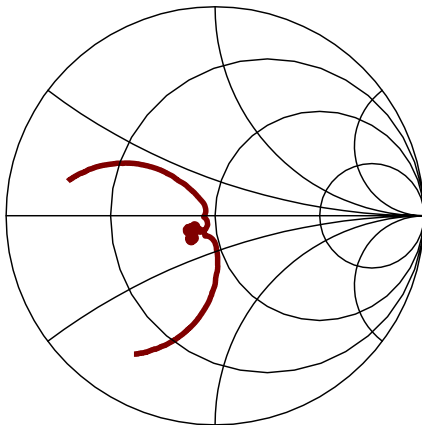
- 70 MHz SAW bandpass filter with 2.5 MHz bandwidth for Wireless Data applications.
- 27.2 x 12.7 mm DIP.
- RoHS compliant.

## TYPICAL PERFORMANCE

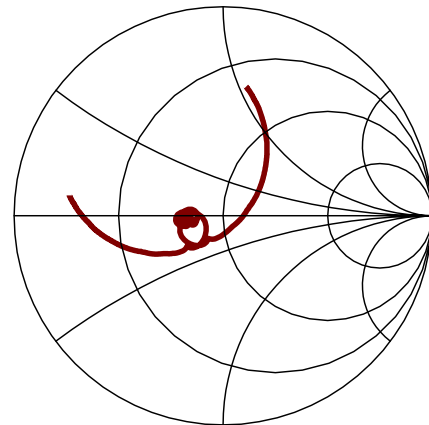


Horizontal: Frequency : 1 MHz/div  
 Vertical from top: Relative Magnitude : 10 dB/div  
 Relative magnitude : 1 dB/div  
 Phase Linearity : 5 deg/div

**S11 (64.99 to 74.99 MHz)**



**S22 (64.99 to 74.99 MHz)**



## SPECIFICATION

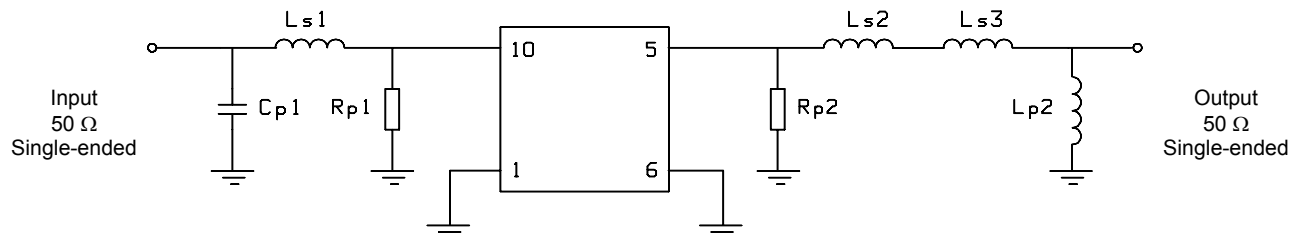
Parameter	Min	Typ	Max	Units
Center Frequency ( Fc ) <sup>1</sup>		69.99		MHz
Minimum Insertion Loss <sup>2</sup>		17	20	dB
Lower 1.5 dB Band Edge		69.33	69.36	MHz
Upper 1.5 dB Band Edge	70.62	70.65		MHz
Lower 14 dB Band Edge	69.21	69.25		MHz
Upper 14 dB Band Edge		70.73	70.77	MHz
Lower 25 dB Band Edge	69.09	69.18		MHz
Upper 25 dB Band Edge		70.80	70.89	MHz
Passband Ripple (Fc +/- 0.615 MHz)		0.5	1.0	dB p-p
Phase Linearity (Fc +/- 0.615 MHz)		4.5	8	deg p-p
Input Return Loss @ Fc	10	16		dB
Output return Loss @ Fc	10	16		dB
Rejection (15 MHz to 61 MHz) <sup>3</sup>	40	60		dB
Rejection (61 MHz to 68 MHz) <sup>3</sup>	30	38		dB
Rejection (72 MHz to 79 MHz) <sup>3</sup>	30	38		dB
Rejection (79 MHz to 140 MHz) <sup>3</sup>	40	50		dB
Source and Load Impedance		50		$\Omega$

- Notes:
1. Average of the lower and upper 3 dB band edge frequencies.
  2. All dB values are referenced to the insertion loss.
  3. Dependent on PC board layout.

## 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		10	dBm

## MATCHING CIRCUIT



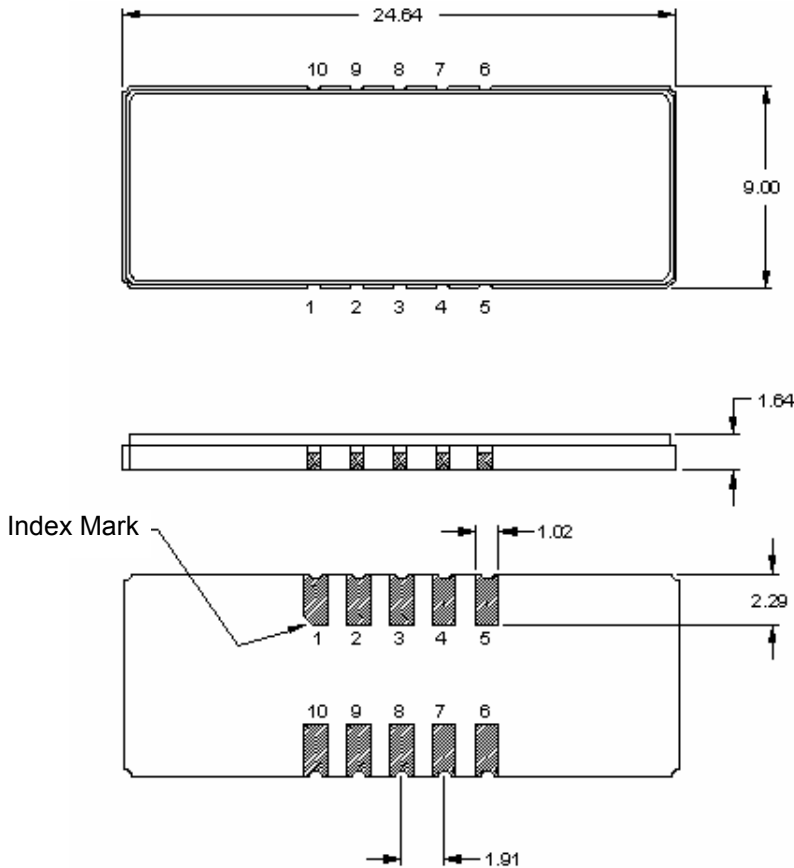
Typical component values:

Ls1 = 220 nH	Ls2 = 120 nH	Ls3 = 56 nH
Cp1 = 120 pF	Lp2 = 47 nH	
Rp1 = 2.4 K $\Omega$	Rp2 = 3 K $\Omega$	

Notes:

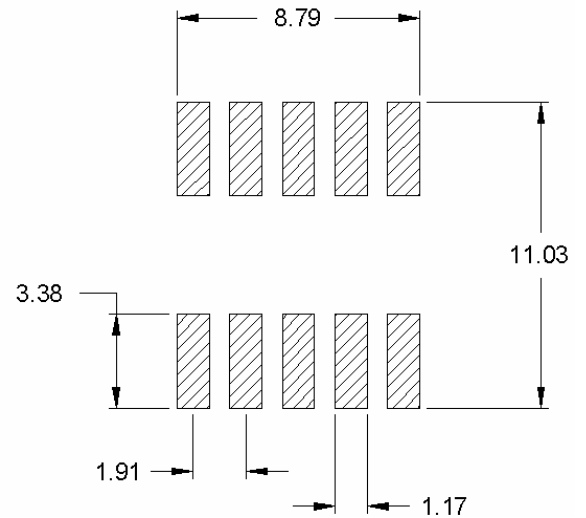
1. Recommend use of +/- 2% tolerance components. Minimum Q=40.
2. Component values are for reference only and may change depending on board layout.

**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**

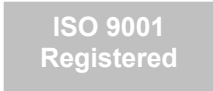


**Units:** mm

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

**Pad Configuration:**

Input:	10
Input return:	1
Output:	5
Output return:	6
Ground:	all other pads



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