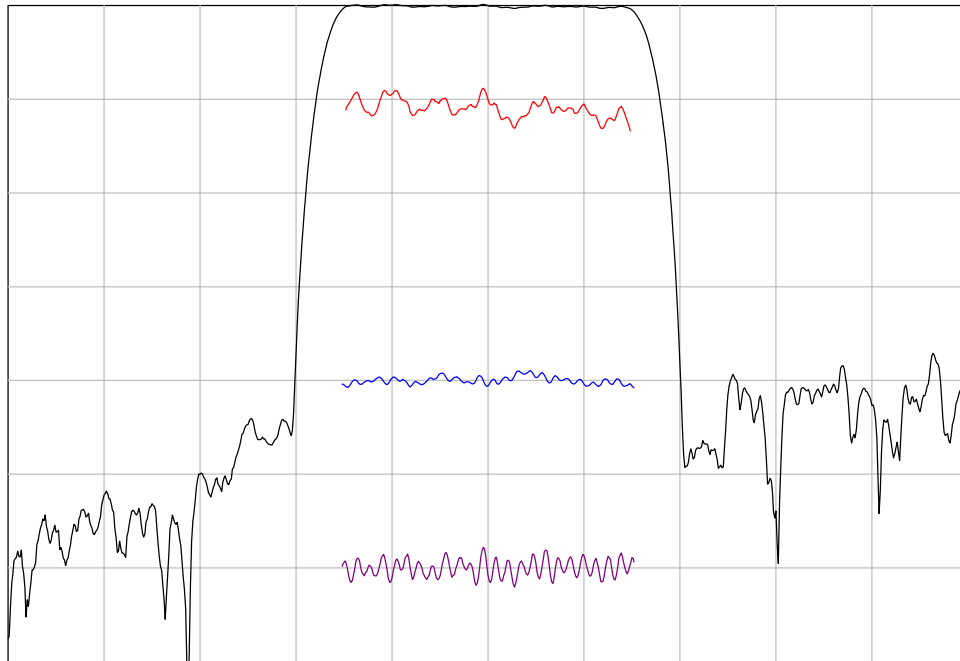


**DESCRIPTION**

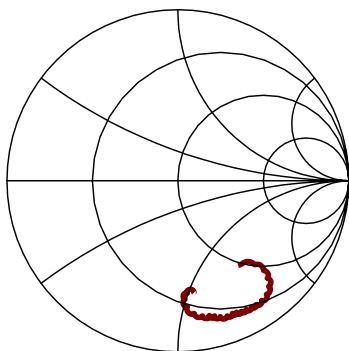
- 36.15 MHz SAW bandpass filter with 8 MHz bandwidth for Broadband Access.
- 24.6 x 9 mm SMP.
- RoHS compliant.

**TYPICAL PERFORMANCE**

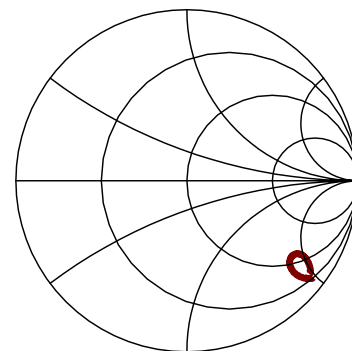


Horizontal:	Frequency :	2.5	MHz/div
Vertical from top:	Relative Magnitude :	10	dB/div
	Relative magnitude :	1	dB/div
	Phase Linearity :	10	deg/div
	Group Delay Deviation :	100	ns/div

**S11 (32.15 to 40.15 MHz)**



**S22 (32.15 to 40.15 MHz)**



## SPECIFICATION

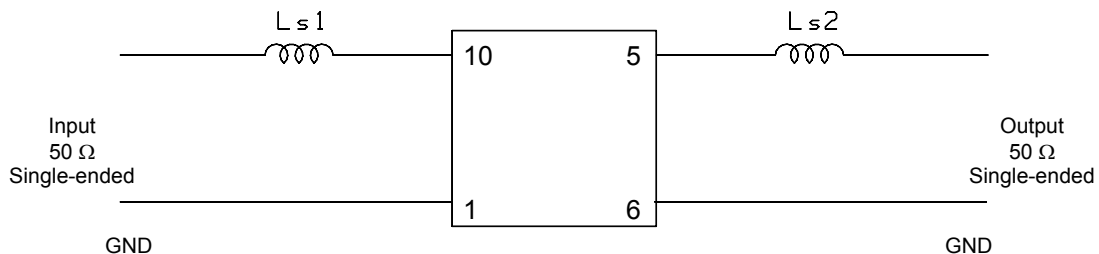
Parameter	Min	Typ	Max	Units
Center Frequency ( Fc ) <sup>1</sup>	36.1	36.15	36.2	MHz
Insertion Loss <sup>2</sup>	-	22	23	dB
1 dB Bandwidth	7.60	7.75	-	MHz
3 dB Bandwidth	8.00	8.20	-	MHz
38 dB Bandwidth	-	10.00	10.50	MHz
Passband Amplitude Ripple <sup>3</sup>	-	0.5	0.7	dB p-p
Passband Phase Ripple <sup>3</sup>	-	2.2	3	deg p-p
Passband Group Delay Ripple <sup>3</sup>	-	30	60	ns p-p
Rejection (10 to 30.9 MHz)	35	40	-	dB
Rejection (41.5 to 55 MHz)	33	40	-	dB
Absolute Delay	-	1.50	-	μs
Ambient Temperature	-	25	-	°C
Source / Load Impedance	-	50	-	Ω
Substrate Material	128 Lithium Niobate			

- Notes:
1. Defined as the average of the lower and upper 3 dB frequencies.
  2. Value at 36.15 MHz.
  3. Measured over Fc +/- 3.8 MHz.
  4. Specifications are guaranteed over the operating temperature range.

## MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	°C
Operating Temperature Range	20	30	°C
Input Power Level		10	dBm

## MATCHING CIRCUIT

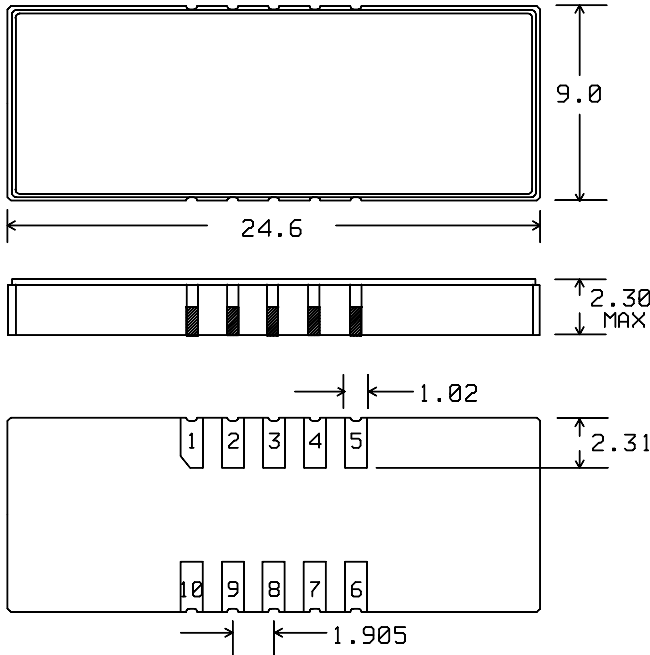


Typical component values:  
(Minimum inductor Q = 40)       $L_{s1} = 470 \text{ nH}$        $L_{s2} = 560 \text{ nH}$

### Notes:

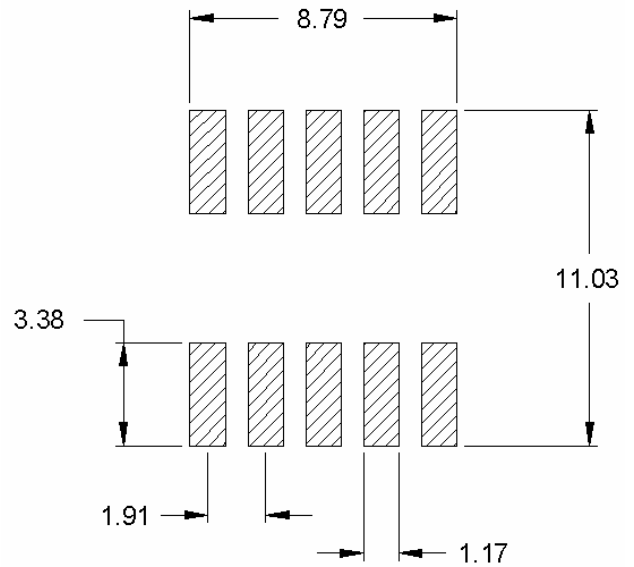
1. Recommend use of 5% tolerance matching components.
2. Component values may change depending on board layout.

**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:	2,3,4,7,8,9

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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