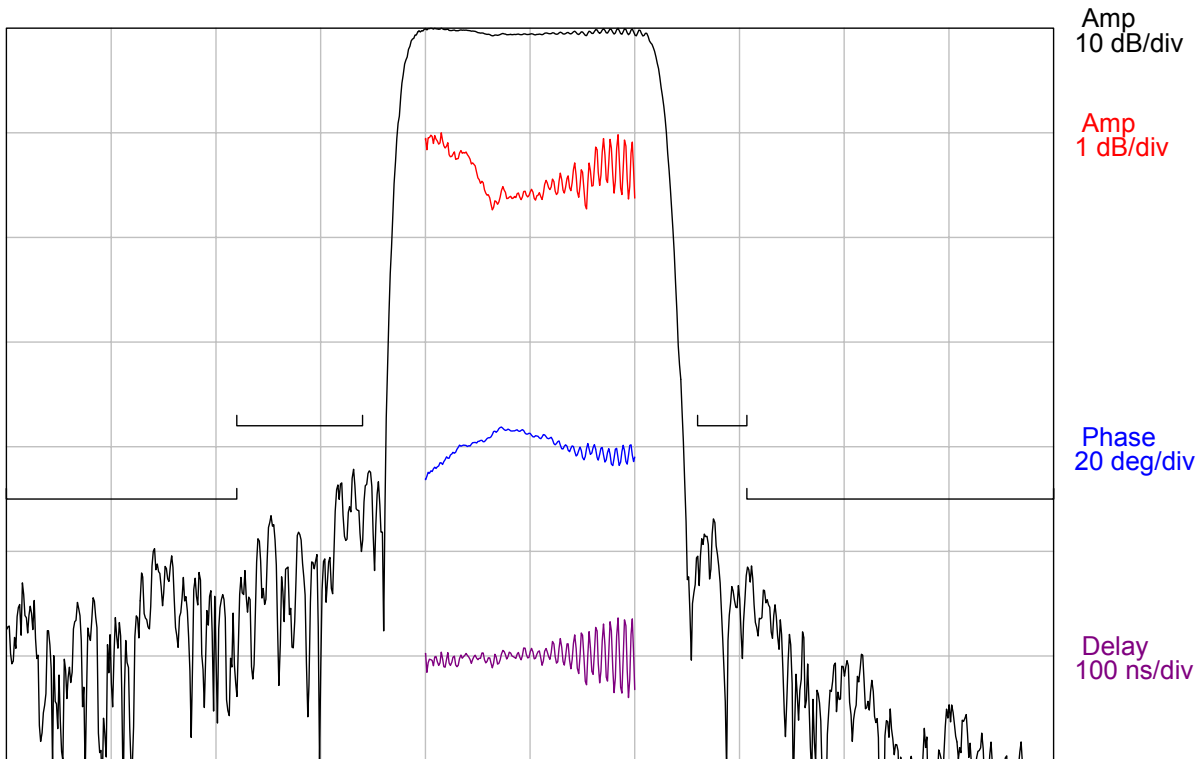


**DESCRIPTION**

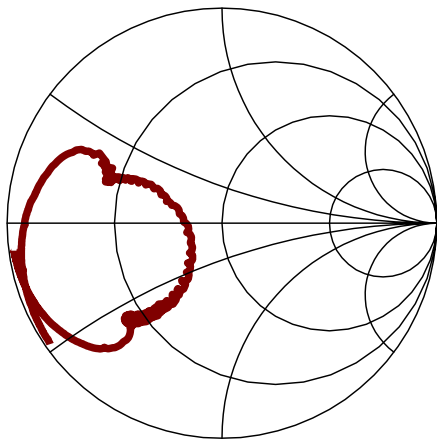
- 107.5 MHz SAW bandpass filter with 20 MHz bandwidth.
- 13.3 x 6.5 mm ceramic LCC package, 12 pads.
- RoHS compliant.

**TYPICAL PERFORMANCE**

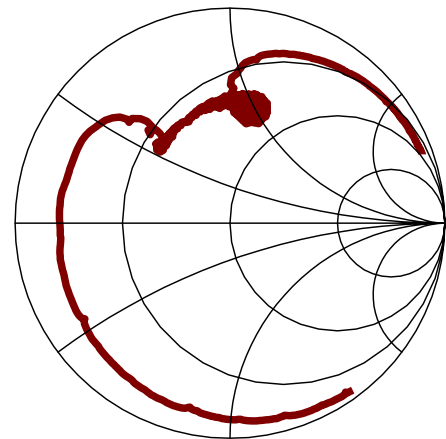


Center = 107.5 MHz, 10 MHz/div (125 kHz incr)

**S11 (57.5-157.5 MHz)**



**S22 (57.5-157.5 MHz)**



## SPECIFICATION

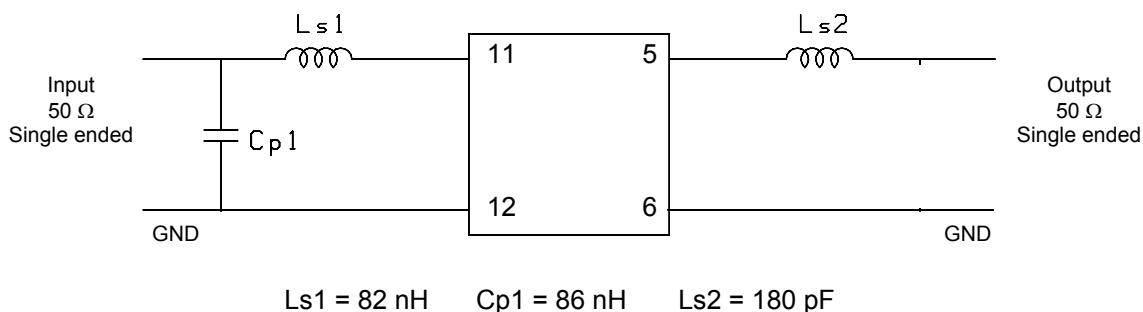
Parameter	Min	Typ	Max	Units
Center Frequency, $F_C$ <sup>1</sup>	-	107.5	-	MHz
Minimum Insertion Loss	-	13.2	15	dB
Absolute Delay	0.6	0.73	0.8	us
Passband Ripple (97.5-117.5 MHz)	-	0.8	1	dB p-p
Group Delay Deviation (97.5-117.5 MHz)	-	80	120	ns p-p
Lower 1 dB Frequency <sup>2</sup>	-	95.9	97.5	MHz
Upper 1 dB Frequency <sup>2</sup>	117.5	118.9	-	MHz
1 dB bandwidth <sup>2</sup>	20	22.6	-	MHz
3 dB bandwidth <sup>2</sup>	21.2	23.9	-	MHz
Relative Attenuation (20-79.5 MHz) <sup>2</sup>	45	50	-	dB
Relative Attenuation (79.5-91.5 MHz) <sup>2</sup>	38	42	-	dB
Relative Attenuation (123.5-128.2 MHz) <sup>2</sup>	38	42	-	dB
Relative Attenuation (128.2-157.5 MHz) <sup>2</sup>	45	50	-	dB
Relative Attenuation (157.5-185 MHz) <sup>2</sup>	40	44	-	dB
Relative Attenuation (185-245 MHz) <sup>2</sup>	32	35	-	dB
Relative Attenuation (245-450 MHz) <sup>2</sup>	40	45	-	dB
Source and Load Impedance	50			ohms
Temperature Coefficient of Frequency	-86			ppm/°C

- Notes: 1. Reference frequency. Computed as mean of the 3 dB frequencies.  
2. All dB values are referenced to the insertion loss value.

## MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	°C
Operating temperature range	-20	60	°C
Input Power Level	-	13	dBm

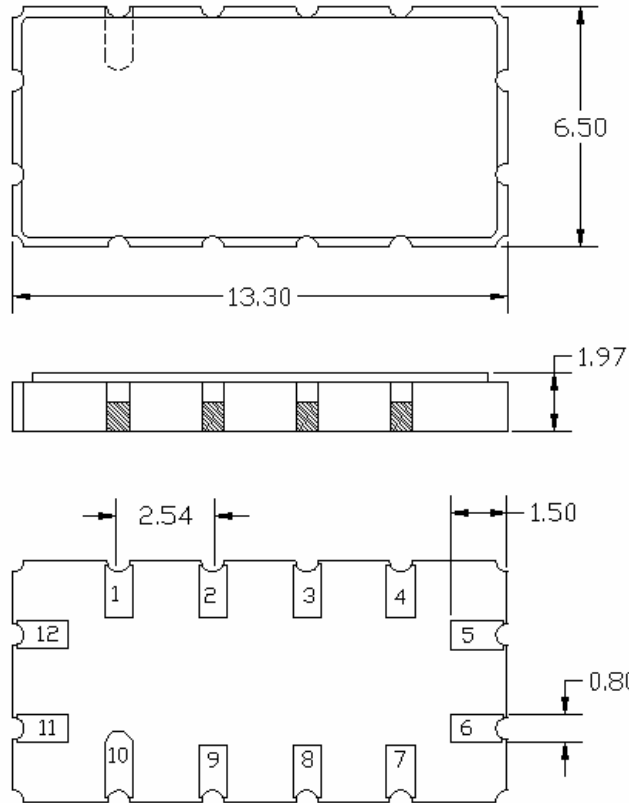
## MATCHING CIRCUIT



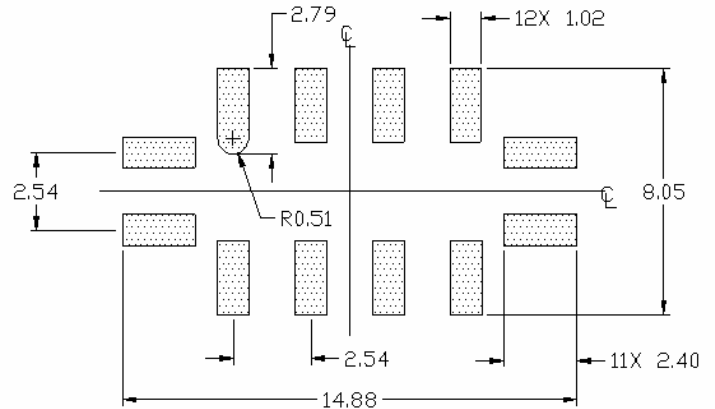
### Notes:

- Recommend 2% or better tolerance matching components. Typical inductor Q=40.
- Optimum values may change depending on board layout. Values shown are intended as a guide only.

**PACKAGE OUTLINE**



**SUGGESTED FOOTPRINT**



Units: mm

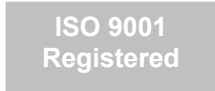
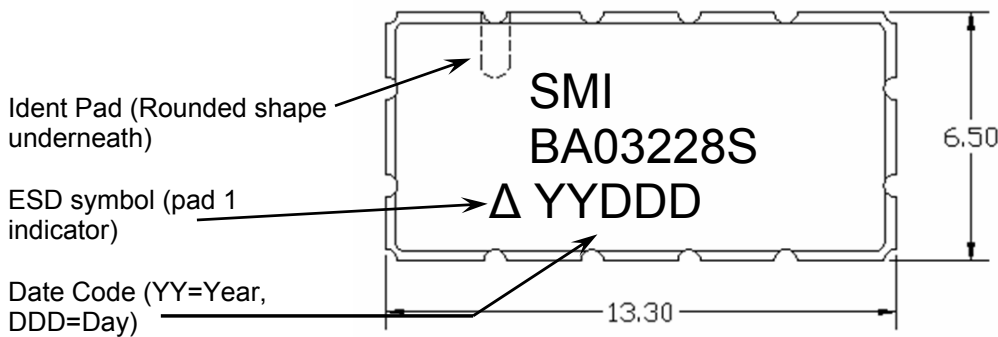
Tolerances are typically  $\pm 0.15$  mm except where indicated.

**Pad Configuration:**

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

**MARKING**



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