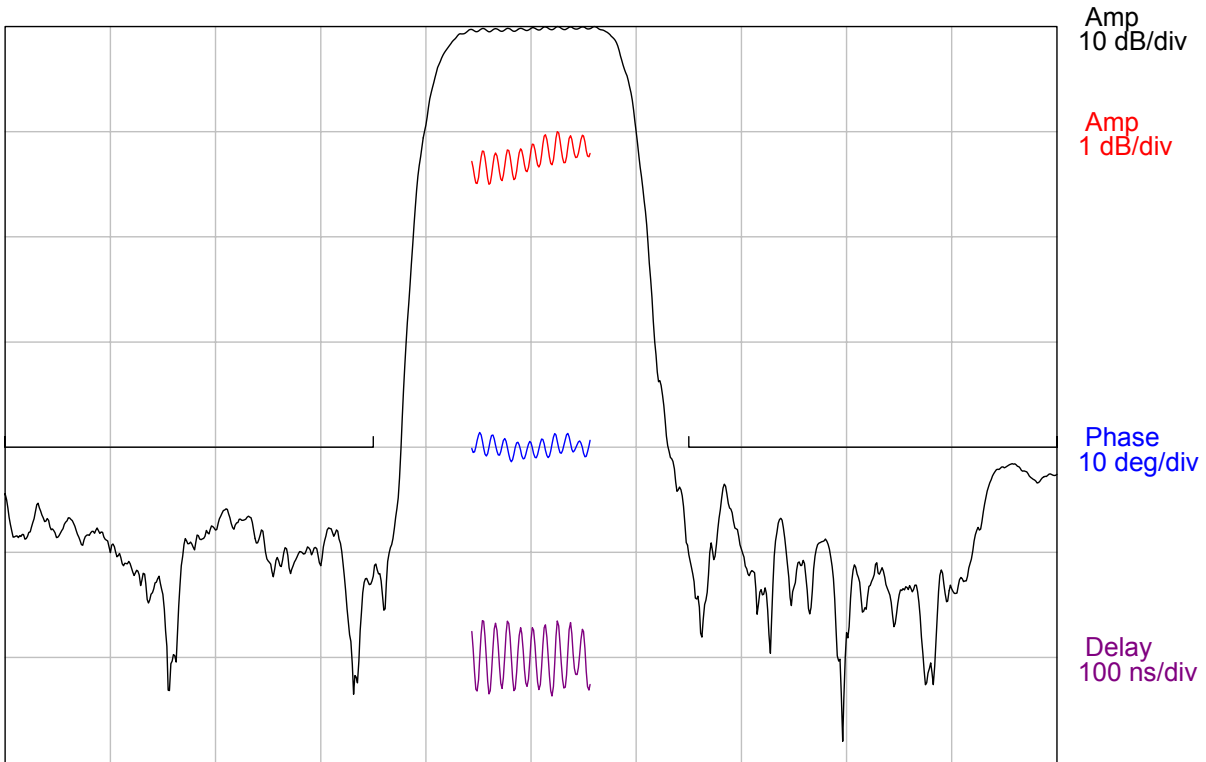


**DESCRIPTION**

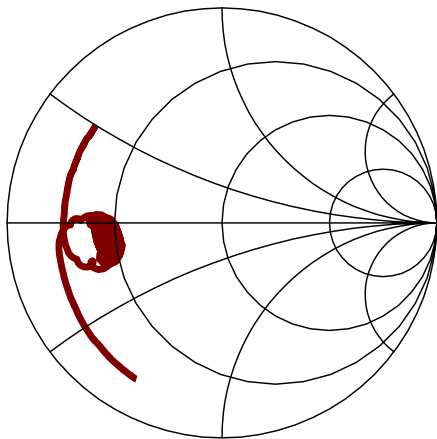
- 73.728 MHz SAW bandpass filter with 4.5 MHz bandwidth.
- 13.3 x 6.5 mm 12-pad LCC package.
- RoHS compliant.

**TYPICAL PERFORMANCE**

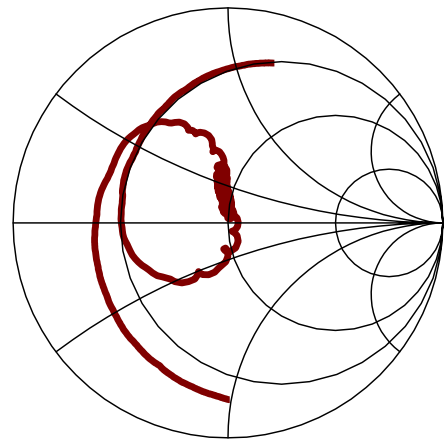


Center = 73.73 MHz, 4 MHz/div (50 kHz incr)

**S11 (53.728-93.728 MHz)**



**S22 (53.728-93.728 MHz)**



## SPECIFICATION

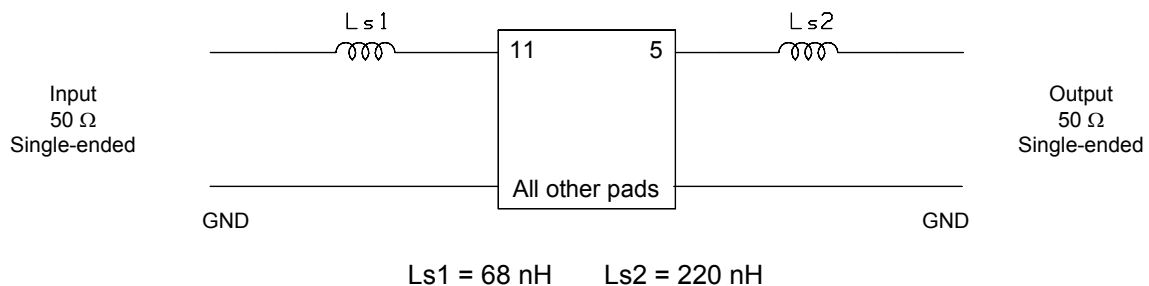
Parameter	Min	Typ	Max	Units
3 dB Center Frequency, $F_c$	-	73.728	-	MHz
Insertion Loss	-	10.8	12.5	dB
Lower 1 dB Frequency <sup>1</sup>	-	70.89	71.478	MHz
Upper 1 dB Frequency <sup>1</sup>	75.978	76.82	-	MHz
1 dB Bandwidth <sup>1</sup>	4.5	5.9	-	MHz
3 dB Bandwidth <sup>1</sup>	5.7	6.8	-	MHz
40 dB Bandwidth <sup>1</sup>	-	10.1	12	MHz
Amplitude Ripple ( $F_c \pm 2.25$ MHz)	-	0.5	1	dB p-p
Phase Ripple ( $F_c \pm 2.25$ MHz)	-	3	6	deg p-p
Group Delay Deviation ( $F_c \pm 2.25$ MHz)	-	70	120	ns p-p
Rejection (20 to 67.728 MHz) <sup>1</sup>	40	44	-	dB
Rejection (79.728 to 150 MHz) <sup>1</sup>	40	43	-	dB
Temperature Coefficient of Frequency ( $T_c$ ) <sup>2</sup>	-86			ppm/°C
Source/Load Impedance	50			ohms
Ambient Temperature ( $T_{ref}$ )	25			°C

- Notes:
1. All dB levels are referenced to the insertion loss.
  2. Typical shift of frequency response with temperature is:  $\Delta f = (T - T_{ref}) * T_c * F_c$ .

## MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	°C
Operating Temperature Range	-20	70	°C
Input Power Level	-	10	dBm

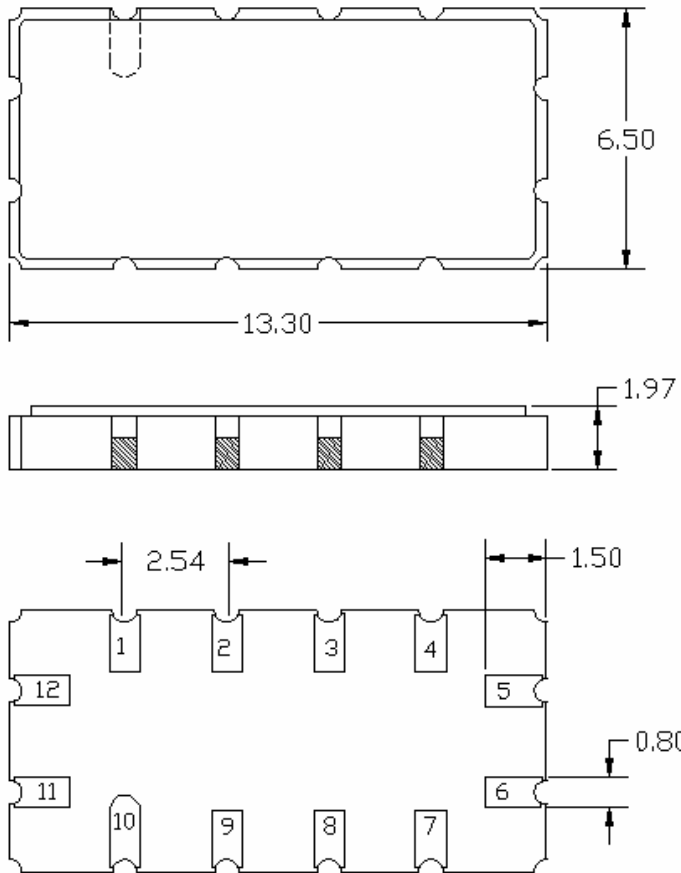
## MATCHING CIRCUIT



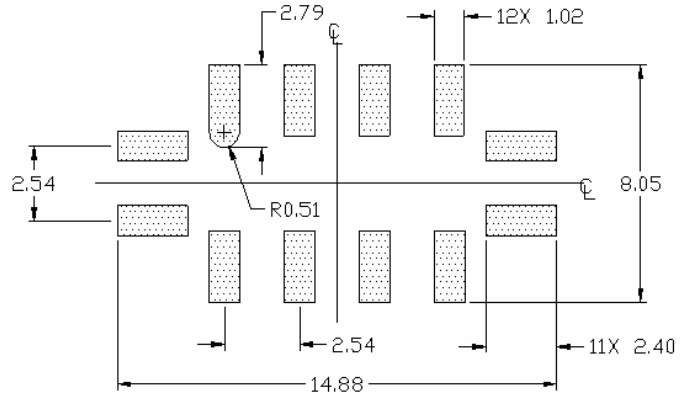
Notes:

- 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

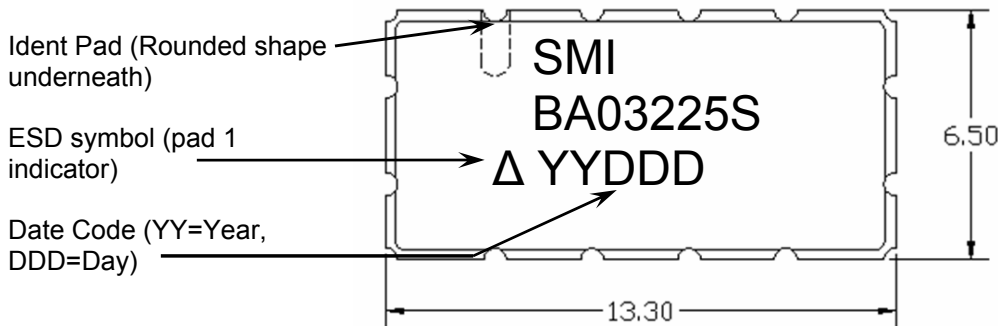
Tolerances are  $\pm 0.15$  mm except where indicated.

**Pad Configuration:**

- Input: 11
- Output: 5
- 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**



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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