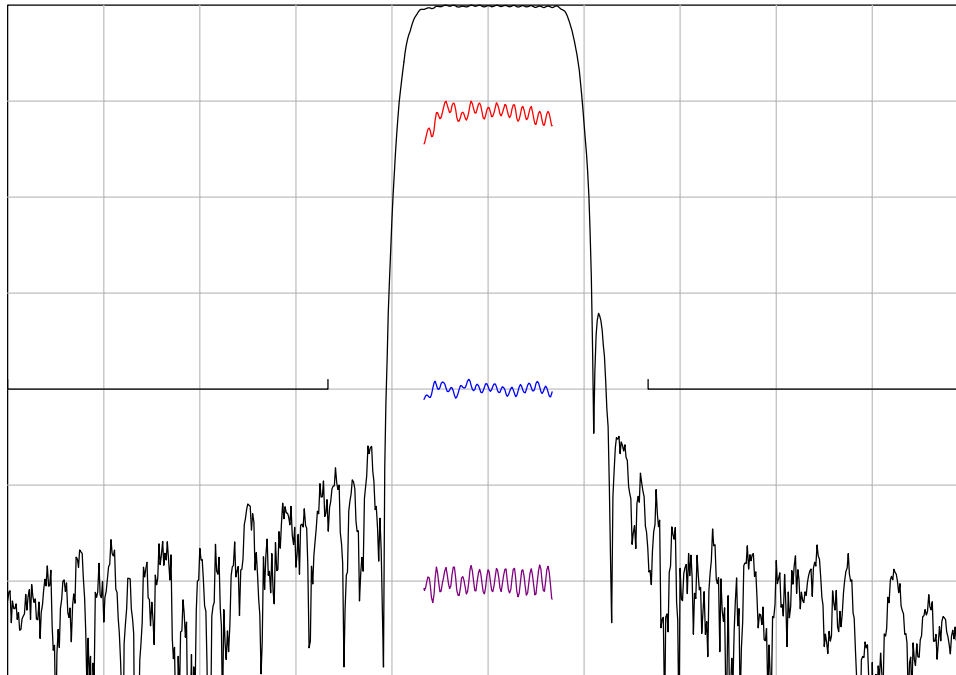


DESCRIPTION

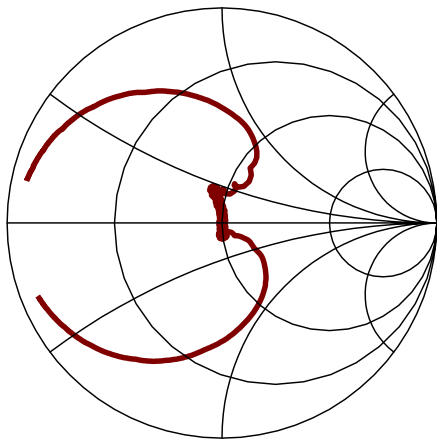
- 190 MHz SAW bandpass filter with 8 MHz bandwidth.
- 13.3 x 6.5 mm ceramic LCC package.
- RoHS compliant.

TYPICAL PERFORMANCE

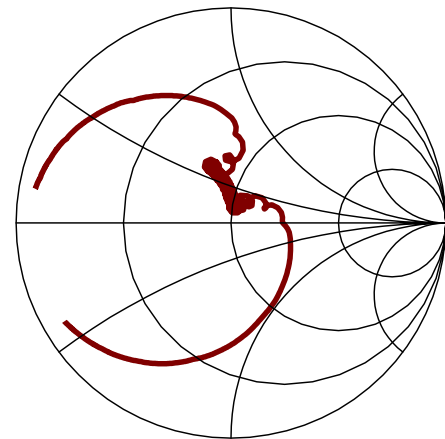


Horizontal:	Frequency	6	MHz /div
Vertical (from top):	Magnitude	10	dB/div
	Magnitude	1	dB/div
	Phase Deviation	10	deg/div
	Group Delay Deviation	100	ns/div

S11 (160-220 MHz)



S22 (160-220 MHz)



SPECIFICATION

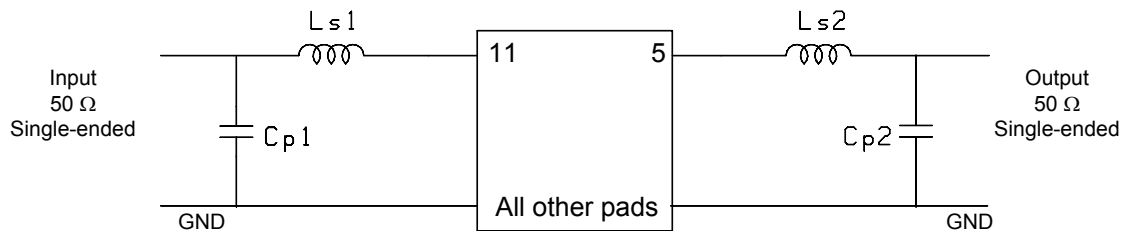
Parameter ²	Min	Typ	Max	Units
Center Frequency (Fc) ¹	189.6	190	190.4	MHz
Insertion Loss	-	12.9	14	dB
1 dB Bandwidth	8	9.36	-	MHz
3 dB Bandwidth	10	10.21	-	MHz
30 dB Bandwidth	-	12.7	15	MHz
Rejection (100 to 180 MHz)	40	48	-	dB
Rejection (200 to 275 MHz)	40	48	-	dB
Passband Ripple (186 to 194 MHz)	-	0.6	1.0	dB p-p
Phase Linearity (186 to 194 MHz)	-	2.5	15	deg p-p
Group Delay Deviation (186 to 194 MHz)	-	40	120	ns p-p
Absolute Delay	-	0.94	-	us
Temperature Coefficient of Fc	-	-18	-	ppm/°C
Source and Load Impedance ³	-	50	-	Ω

- Notes:
1. All parameters are based upon matching circuit.
 2. All parameters are evaluated at ambient temperature only.
 3. Optimum impedance in order to achieve performance shown.

MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	°C
Input Power Level	-	+13	dBm

MATCHING CIRCUIT



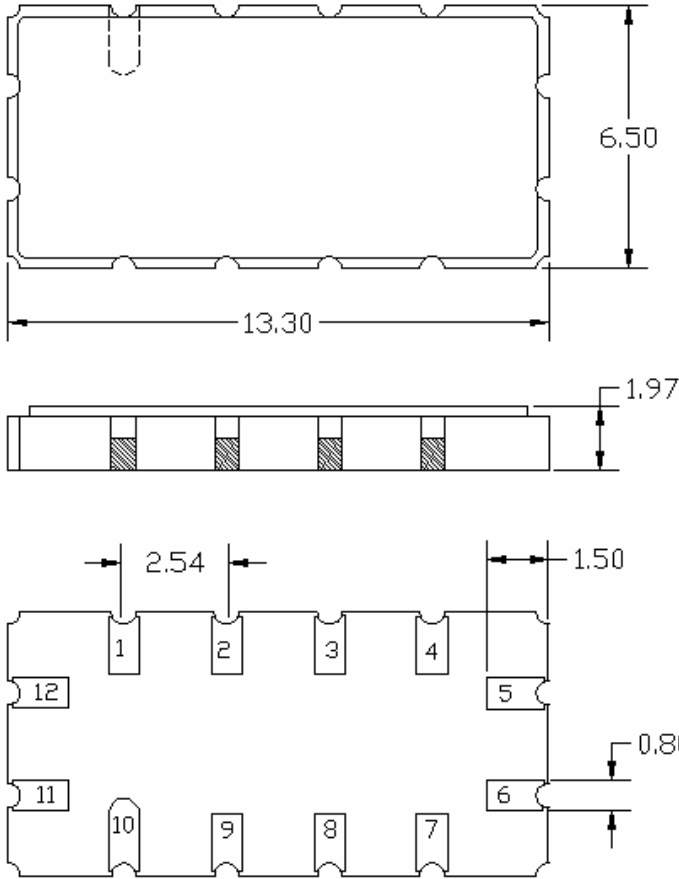
Typical component values:

Ls1 = 68 nH	Ls2 = 62.8 nH
Cp1 = 39 pF	Cp2 = 39 pF

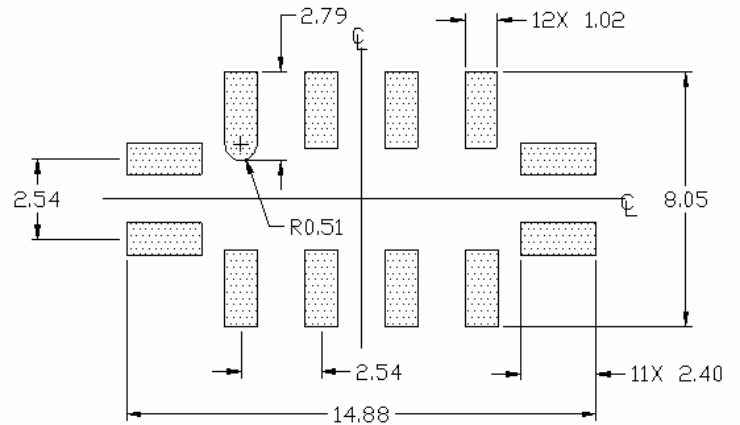
Notes:

1. Recommend +/-2% tolerance matching components. Typical inductor Q=40.
2. Tuning values shown are for reference only. Optimum values may change depending upon board layout.

PACKAGE OUTLINE



SUGGESTED FOOTPRINT



Units: mm

Tolerances are ± 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 μ m min, over a 1.3-8.9 μ m Ni plating

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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