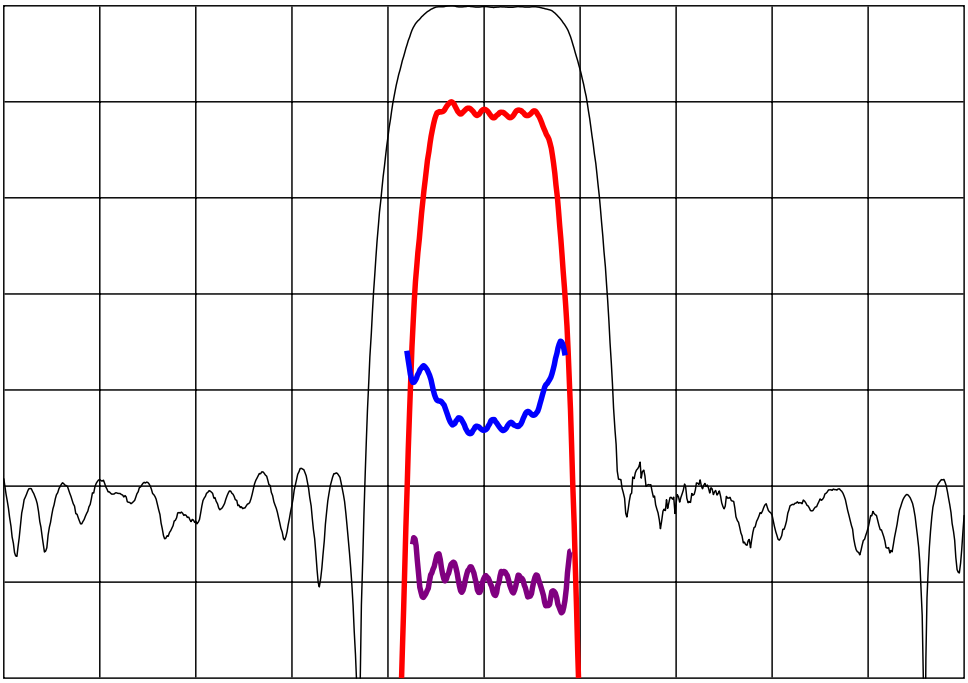
DESCRIPTION

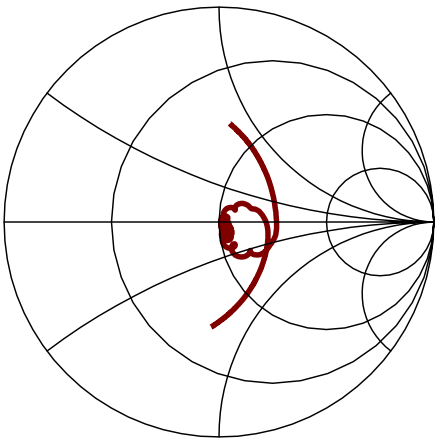
- 140 MHz SAW bandpass filter with 2.6 MHz bandwidth.
- 13.3 x 6.5 mm ceramic LCC package.
- RoHS compliant.

TYPICAL PERFORMANCE

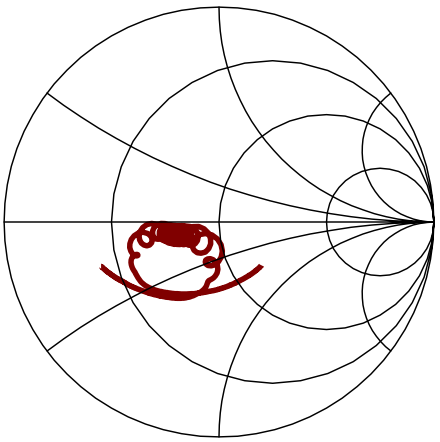


Horizontal:	Frequency :	2	MHz/div
Vertical from Top:	Relative Magnitude :	10	dB/div
	Relative magnitude :	1	dB/div
	Phase Linearity :	5	deg/div
	Group Delay Deviation :	100	ns/div

S11 (130 to 150 MHz)



S22 (130 to 150 MHz)



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SPECIFICATION

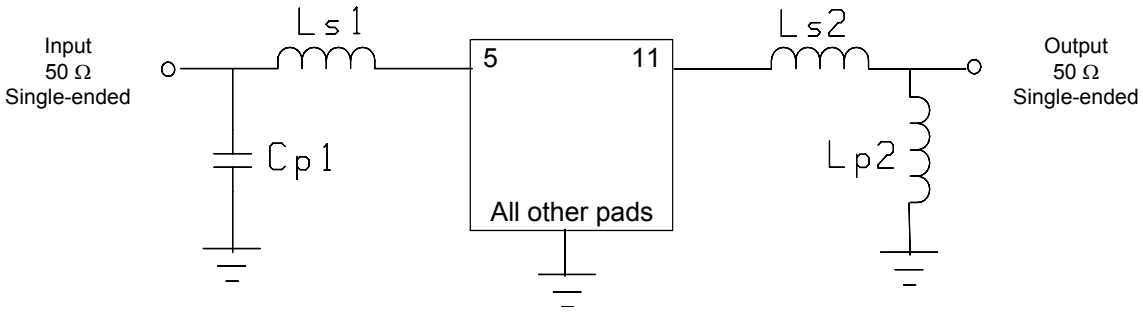
Parameter	Min	Typ	Max	Units
Center Frequency, F_C [1]	139.70	140.00	140.30	MHz
Minimum Insertion Loss	10	11.7	13	dB
1 dB Bandwidth [2]	2.6	2.74	-	MHz
3 dB Bandwidth [2]	2.8	3.32	-	MHz
40 dB Bandwidth [2]	-	5.04	5.3	MHz
Ultimate Rejection (70 to 210 MHz) [2]	40	45	-	dB
Passband Ripple (Fc+/-1.3 MHz) [3]	-	0.5	1.0	dB p-p
Phase Ripple (Fc+/-1.3 MHz) [3]	-	4.1	5	deg p-p
Group Delay Ripple (Fc+/-1.3 MHz) [3]		100	300	ns/div
Temperature Coefficient of Fc	-	-18	-	ppm/˚C
Source/Load Impedance		50		ohms
Ambient Temperature	-	25	-	˚C

Notes:
1. Defined as the average of the lower and upper 3 dB frequencies at room ambient.
2. All dB levels are defined relative to the insertion loss.
3. This parameter shall be evaluated as +/- 1.3 MHz from actual Fc obtained.

MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	˚C
Operating Temperature Range	5	50	˚C
Input Power Level	-	10	dBm

MATCHING CIRCUIT

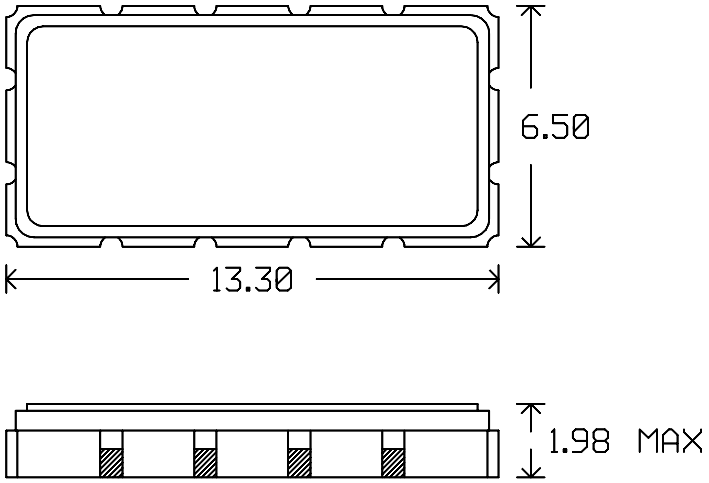


Typical component values:

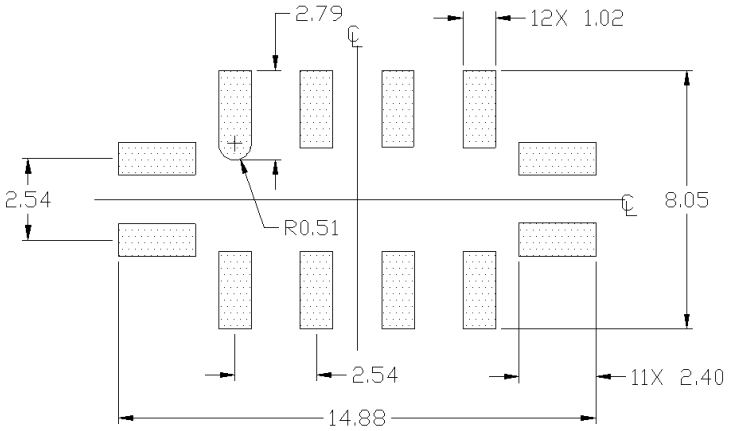
Ls1	=	20	nH	Ls2	=	15	nH
Cp1	=	72	pF	Lp2	=	27	nH

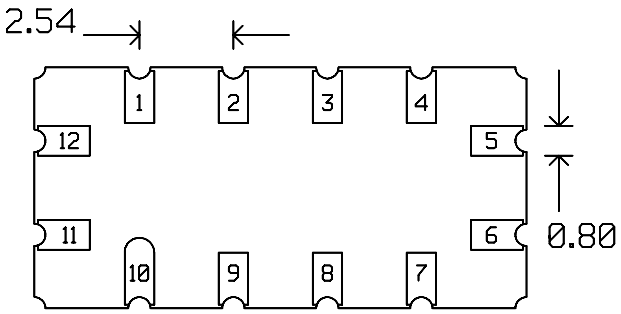
Notes:
1. Recommend use of 2% tolerance matching components. Typical inductor Q=40.
2. Component values are for reference only and may change depending on board layout.

PACKAGE OUTLINE



SUGGESTED FOOTPRINT





Units: mm

Tolerances are ±0.15 mm except where indicated.

Pad Configuration:

Input:	5
Output:	11
Ground:	1,2,3,5,7,8,9,10

Package Material:
Body: Al_2O_3 ceramic
Lid: *Kovar, Ni* plated
Terminations: *Au* plating 1 µm min, over a 1.3-8.9 µm *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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