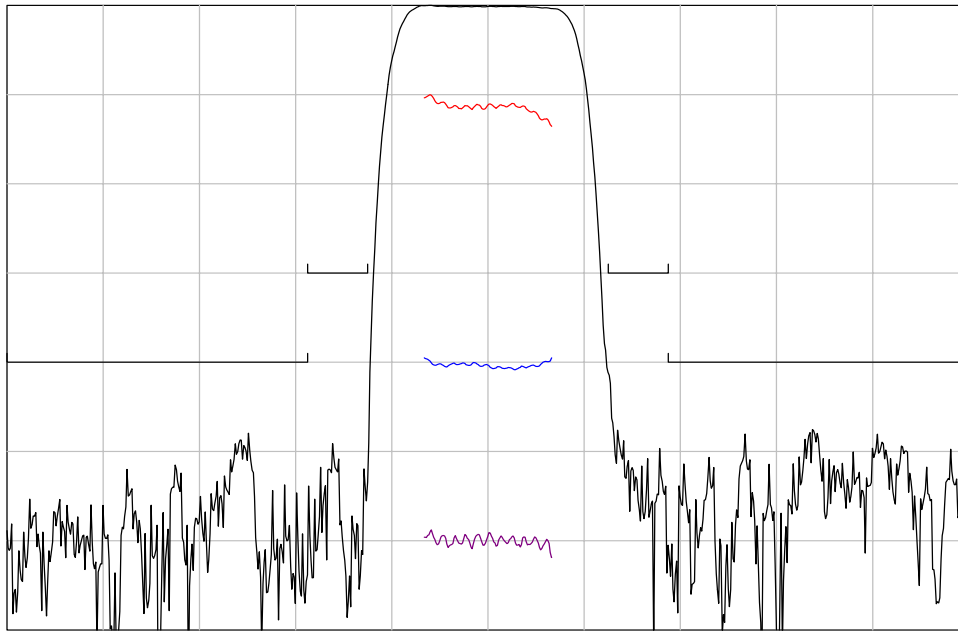


DESCRIPTION

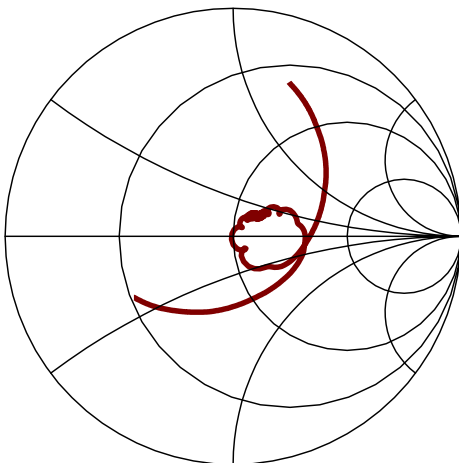
- 140 MHz SAW bandpass filter with 5 MHz bandwidth in 13.3 x 6.5 mm SMP.
- RoHS compliant.

TYPICAL PERFORMANCE

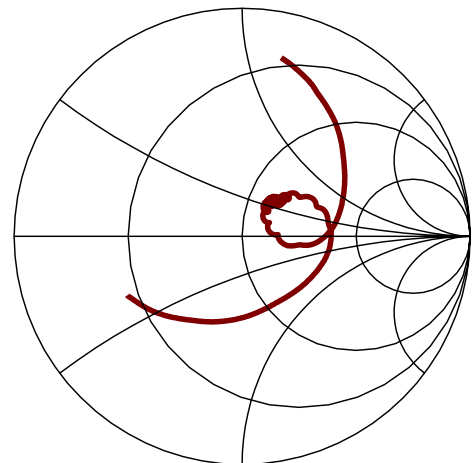


Horizontal:	Frequency	3	MHz / div
Vertical (from top):	Magnitude	10	dB/div
	Magnitude	1	dB/div
	Phase Deviation	10	deg/div
	Group Delay Deviation	100	ns/div

S11 (125-165 MHz)



S22 (125-165 MHz)



SPECIFICATION

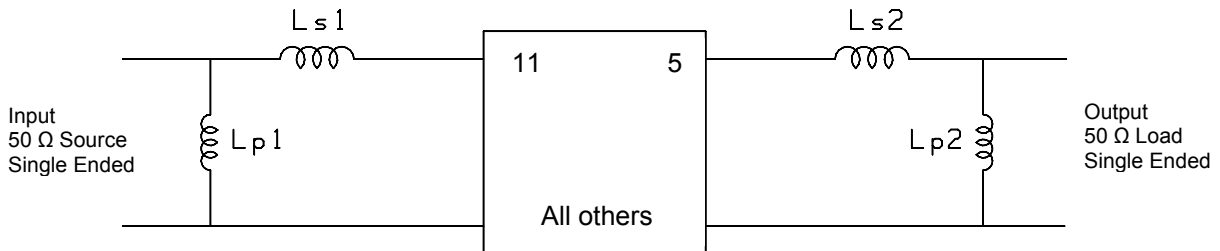
Parameter	Min	Typ	Max	Units
Center Frequency (Fc) ¹	-	140.00	-	MHz
Insertion Loss ²	-	12.0	13.5	dB
Lower 1dB Band Edge	-	137.26	137.55	MHz
Upper 1dB Band Edge	142.45	142.86	-	MHz
Lower 3dB Band Edge	-	136.96	137.35	MHz
Upper 3dB Band Edge	142.65	143.14	-	MHz
Lower 30dB Band Edge	136.00	136.17	-	MHz
Upper 30dB Band Edge	-	143.88	144.00	MHz
Passband Ripple ³	-	0.42	0.7	dB p-p
Phase Ripple ³	-	1.3	3	deg p-p
Group Delay Variation ³	-	30	50	ns p-p
Rejection ²				
(70 to 125 MHz)	50	55	-	dB
(125 to 135.5 MHz)	43	47	-	dB
(144.5 to 155 MHz)	43	47	-	dB
(155 to 210 MHz)	40	44	-	dB
Temperature Coefficient of Frequency	-	-23	-	ppm/°C
Ambient Temperature	-	25	-	°C
System Source and Load Impedance		50		Ω

- Notes: 1. Defined as the average of the lower and upper 3 dB frequencies.
2. All dB levels are defined relative to the insertion loss.
3. Defined over 137.88 to 142.12 MHz.

MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	+85	°C
Input Power Level		+13	dBm
DC Voltage Between Each Terminal		15	V

MATCHING CIRCUIT



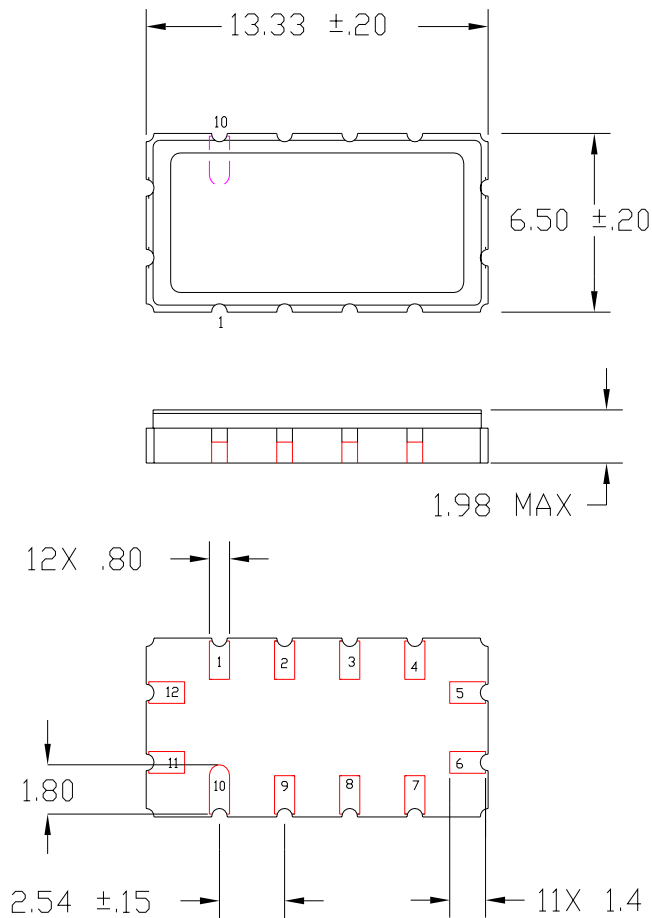
$$Ls1 = 15 \text{ nH} \quad Lp1 = 22 \text{ nH} \quad Ls2 = 27 \text{ nH} \quad Lp2 = 22 \text{ nH}$$

Notes:

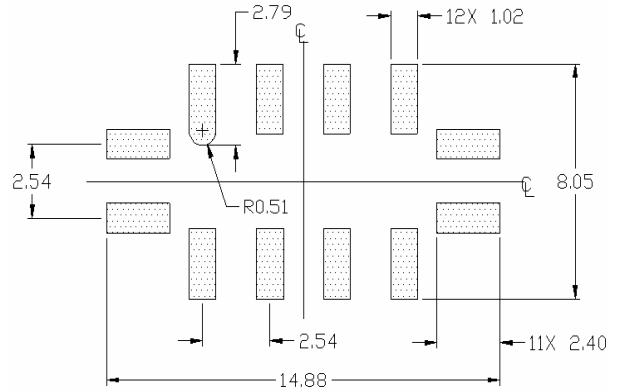
1. Recommend +/-2% tolerance inductors, Q=40 minimum.
2. Component values shown are for reference only and may change depending on board layout.

PACKAGE OUTLINE AND RECOMMENDED PCB LAYOUT

PACKAGE INFORMATION



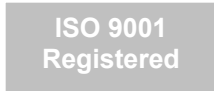
RECOMMENDED PCB FOOTPRINT



Pin Configuration:	
11	Input
12	Input Return
5	Output
6	Output Return
All Others	Ground

NOTE:
Dimensions shown are all nominal in millimeters. All tolerances are ±0.15mm except overall length and width.

Package Material:
Body: Al₂O₃ ceramic
Lid: Kovar, Ni plated
Terminations: Au plating 1 µm min,
over a 1.3-8.9 µm Ni plating



All specifications are believed to be accurate and reliable. However, Spectrum Microwave reserves the right to make changes without notice.
© 2010 All rights reserved.