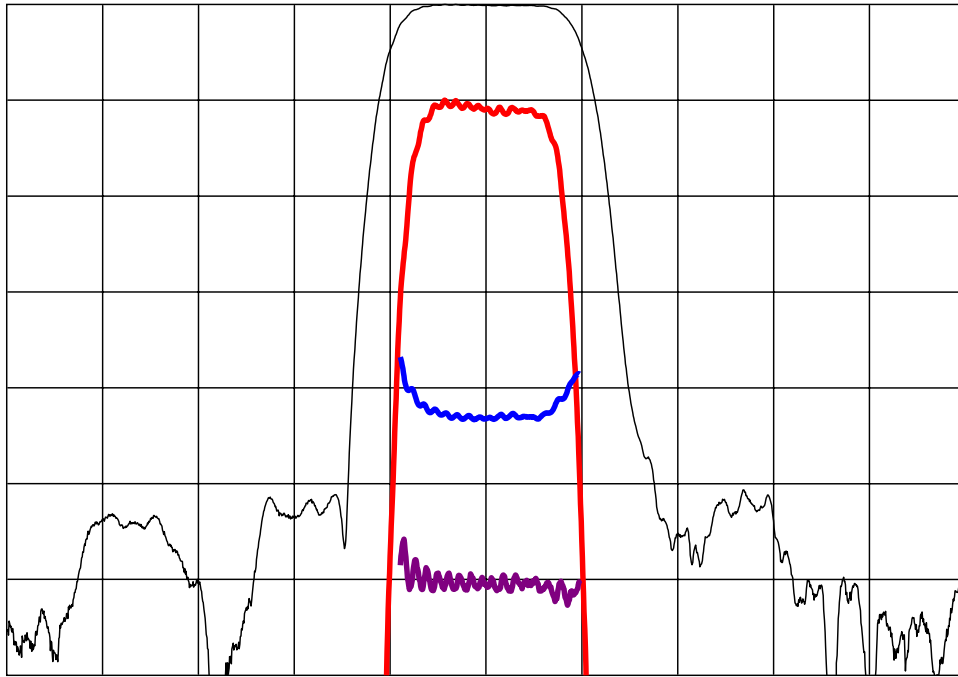


DESCRIPTION

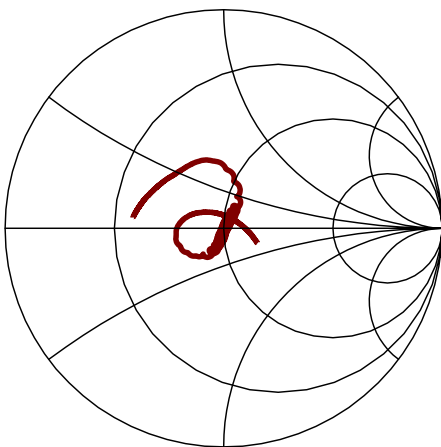
- 107.6 MHz SAW bandpass filter with 3.84 MHz bandwidth.
- 13.3 x 6.5 mm LCC package.
- RoHS compliant.

TYPICAL PERFORMANCE

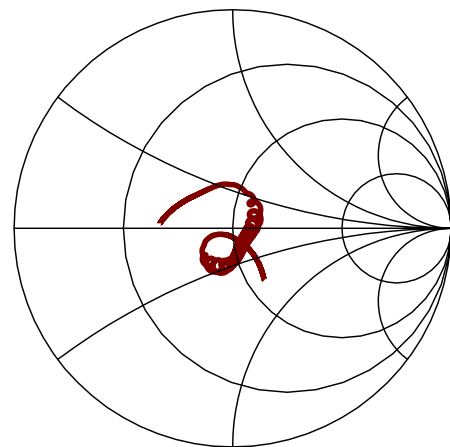


Horizontal: Frequency : 4 MHz/div
 Vertical from Top: Relative Magnitude : 10 dB/div
 Relative magnitude : 1 dB/div
 Phase Linearity : 10 deg/div
 Group Delay Deviation : 100 ns/div

S11 (86.7 to 126.7 MHz)



S22 (86.7 to 126.7 MHz)



SPECIFICATION

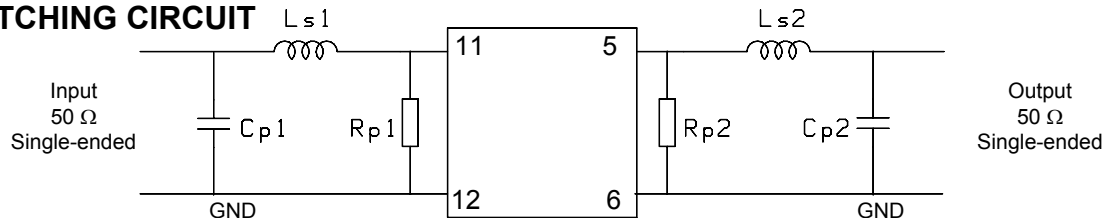
Parameter	Min	Typ	Max	Units
Center Frequency, F_c (fixed reference)	-	107.6	-	MHz
Operating Bandwidth	-	3.84	-	MHz
Insertion loss at F_c	-	13.5	15	dB
Amplitude Ripple ¹	-	0.2	1	dB p-p
Triple Travel Suppression	35	48	-	dB
Lower 35 dB Frequency	101.2	102.1	-	MHz
Upper 35 dB Frequency	-	113.2	114.0	MHz
Phase Linearity	-	1.5	8	deg p-p
Group Delay Variation ¹	-	20	100	ns p-p
Absolute Delay	-	1.08	1.5	us
Rejection (0.3 to 7 MHz) ²	25	40	-	dB
Rejection (7 to 96 MHz) ²	45	50	-	dB
Rejection (96 to 101.2 MHz) ²	35	50	-	dB
Rejection (114 to 122 MHz) ²	35	43	-	dB
Rejection (122 to 200 MHz) ²	45	50	-	dB
Rejection (200 to 230 MHz) ²	25	40	-	dB
Rejection (230 to 300 MHz) ²	45	55	-	dB
Input and Output Return Loss ^{1,5}	10	13	-	dB
Two-tone Input Third Order Intercept ³	35	40	-	dBm
Source/Load Impedance	50			ohms
Ambient Temperature	-	25	-	°C

- Notes:
1. Applies over the operating bandwidth.
 2. Rejection relative to passband insertion loss.
 3. Measured with tones spaced at 10 and 20 MHz above and below F_c .
 4. All parameters to be met over the operating temperature range except return loss.
 5. Measured at room temperature only.

MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	95	°C
Operating Temperature Range	-10	85	°C
Input Power Level	-10	17	dBm

MATCHING CIRCUIT



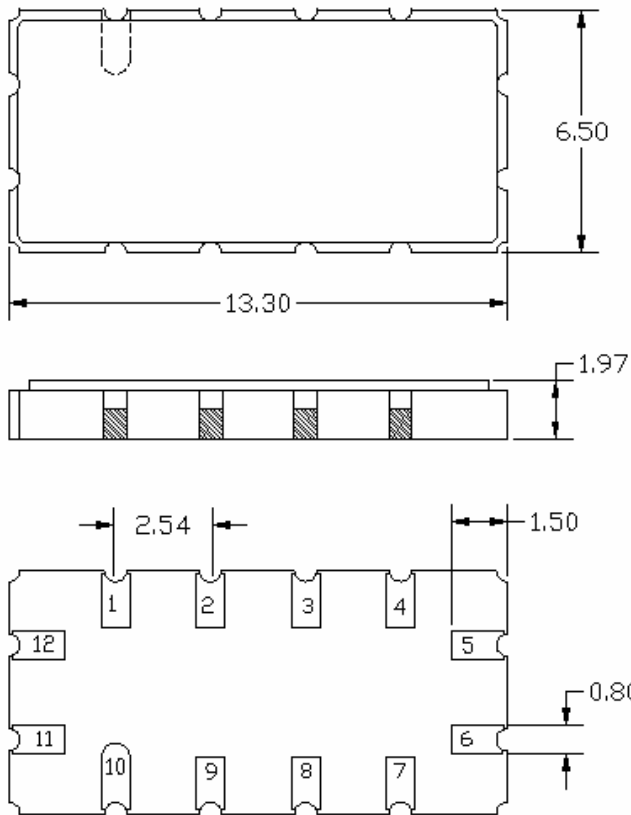
Typical component values:

L_{s1}	=	59	nH	L_{s2}	=	68	nH
C_{p1}	=	37	pF	C_{p2}	=	37	pF
R_{p1}	=	68	Ω	R_{p2}	=	68	Ω

Notes:

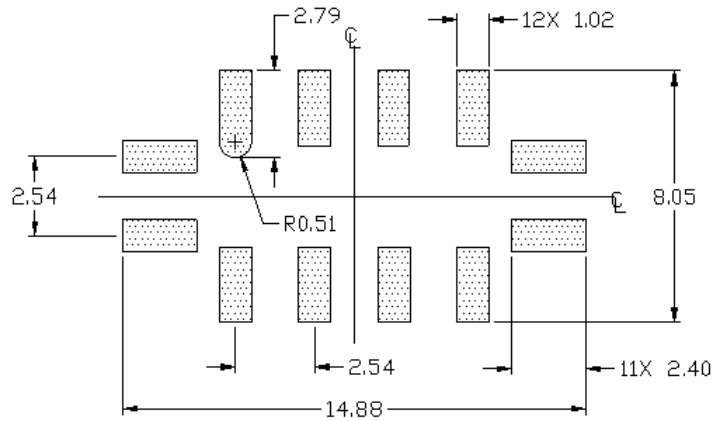
1. Recommend use of 2% tolerance matching components.
2. Component values are for reference only and may change depending on board layout.

PACKAGE OUTLINE



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

SUGGESTED FOOTPRINT



Units: mm

Tolerances are ± 0.15 mm except for the overall length and width, which are nominal values.

Pad Configuration:

Input:	11
Input return:	12
Output:	5
Output return:	6
Ground:	All other pads

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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