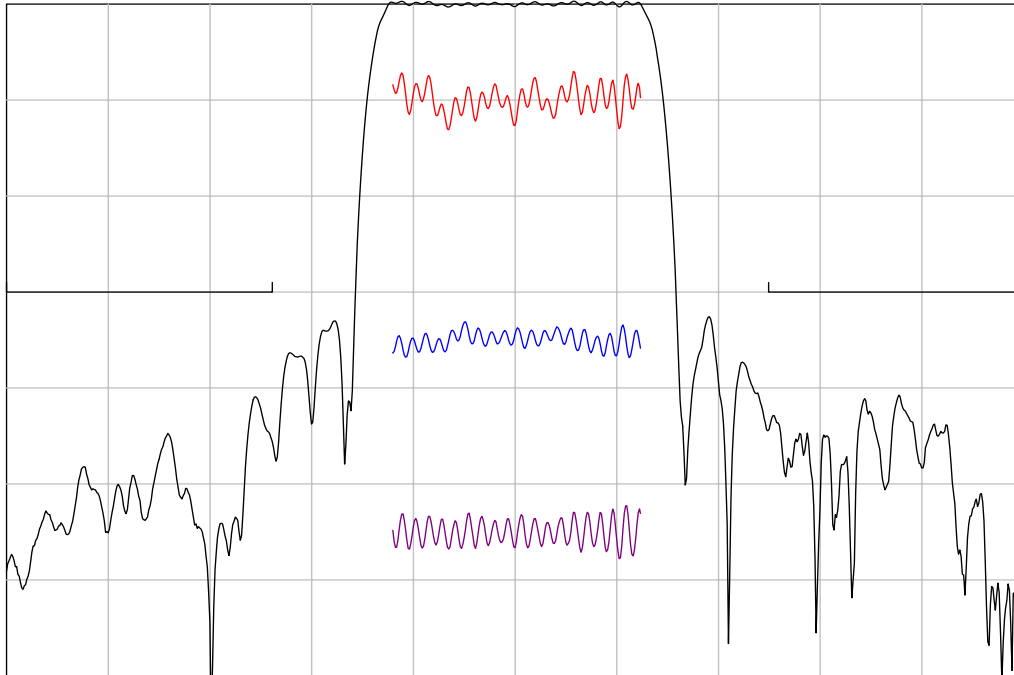


DESCRIPTION

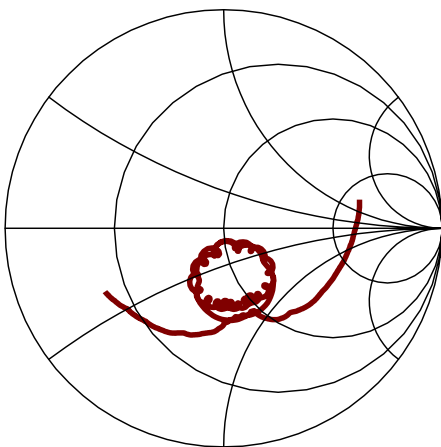
- 77.8 MHz SAW bandpass filter with 9.24 MHz bandwidth.
- 13.3 x 6.5 mm SMP package.
- RoHS compliant.

TYPICAL PERFORMANCE

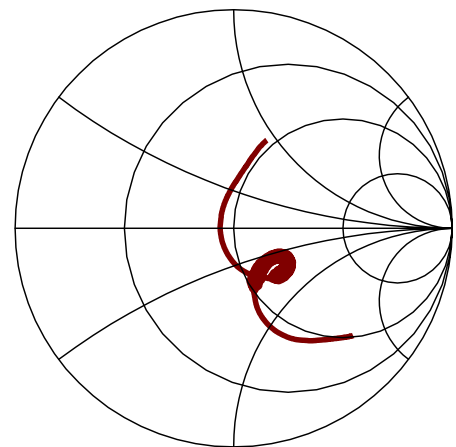


Horizontal: Frequency : 4 MHz/div
 Vertical from Top: Relative Magnitude : 10 dB/div
 Relative magnitude : 1 dB/div
 Phase Linearity : 10 deg/div
 Group Delay : 100 ns/div

S11



S22



SPECIFICATION

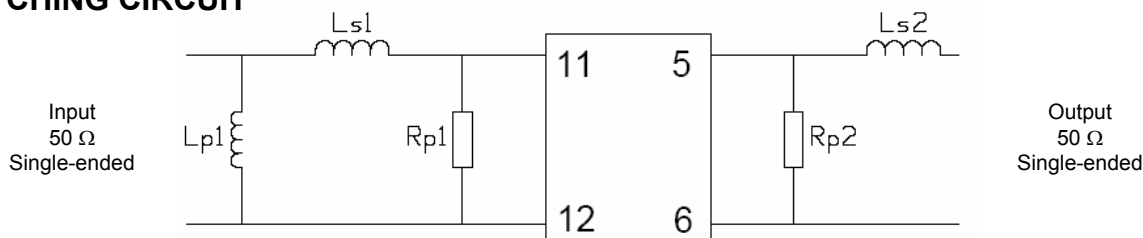
Parameter ²	Min	Typ	Max	Units	
Center Frequency (Fc) ¹	-	77.8	-	MHz	
Operating Bandwidth	9.24	10.1	-	MHz	
Insertion Loss	-	15.5	17	dB	
Amplitude Ripple ³	-	0.6	1.2	dB p-p	
Triple Travel Suppression	30	36	-	dB	
Phase Deviation from Linear ³	-	4	10	deg p-p	
Group Delay Variation ³	-	100	180	ns p-p	
Absolute Delay	-	0.97	-	us	
Rejection at Fc+/-6.0 MHz ²	5	7	-	dB	
Rejection at Fc+7.1 MHz ²	16	18	-	dB	
Rejection ²	0.3 to 55 MHz	45	59	-	dB
	55 to 68 MHz	30	40	-	dB
	88 to 100 MHz	30	41	-	dB
	100 to 115 MHz	45	52	-	dB
	115 to 135 MHz	42	47	-	dB
	135 to 150 MHz	45	52	-	dB
	150 to 165 MHz	30	37	-	dB
	165 to 220 MHz	45	55	-	dB
	220 to 250 MHz	26	30	-	dB
250 to 500 MHz	40	63	-	dB	
Input/Output Return Loss (Fc+/-4.62 MHz)	6	8.5	-	dB	
Temperature Coefficient of Frequency	-	-74	-	ppm/°C	
System Source and Load Impedance	-	50	-	Ω	

- Notes:
1. Fixed reference frequency..
 2. Rejection relative to passband insertion loss
 3. Evaluated over any 3.84 MHz band within Fc+/-4.62 MHz.
 4. All parameters met over operating temperature range.

MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	°C
Operating Temperature Range	-10	75	°C
Input Power Level	-	22	dBm

MATCHING CIRCUIT



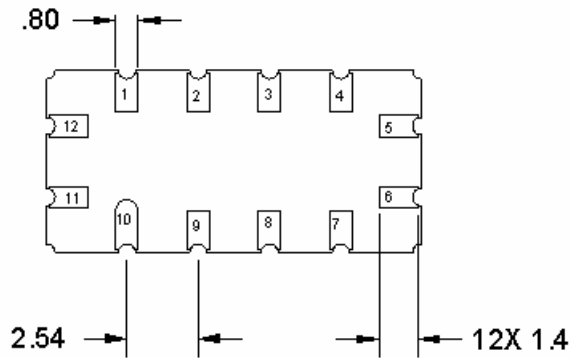
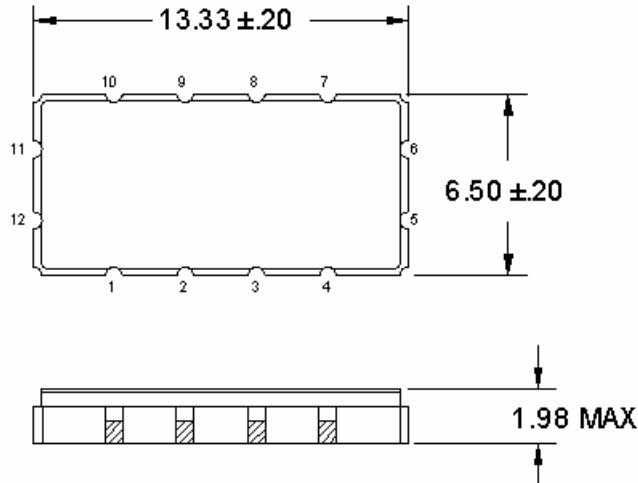
Typical component values:
(Minimum inductor Q = 45)

Ls1 =	56 nH	Ls2 =	330 nH
Lp1 =	150 nH	Rp1 =	560 Ω
Rp2 =	1000 Ω		

Notes:

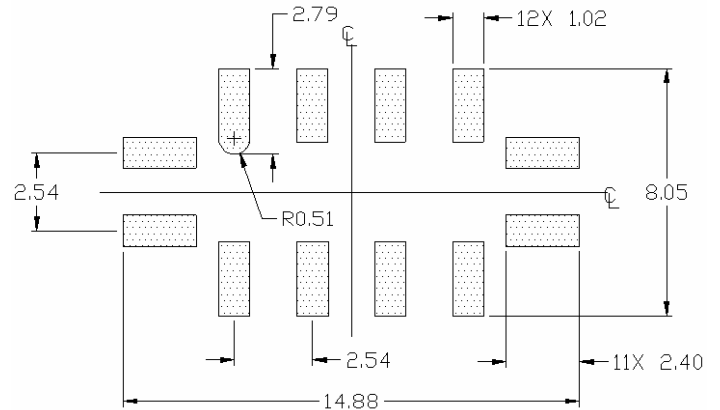
1. Recommend the use of +/-2% tolerance components.
2. Component values shown are for guidance only and may change depending on board layout.

PACKAGE OUTLINE



Package Material:
Body: Al_2O_3 ceramic
Lid: Kovar, Ni plated
Terminations: Au plating $1 \mu\text{m}$ min,
over a $1.3\text{-}8.9 \mu\text{m}$ 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:	1,2,3,4,7,8,9,10

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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