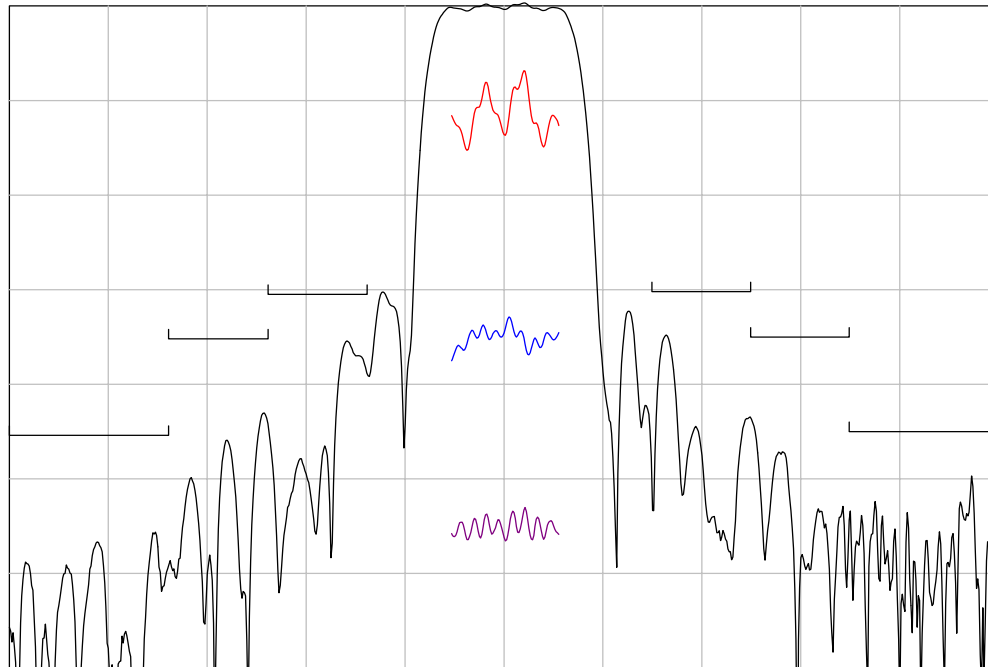


DESCRIPTION

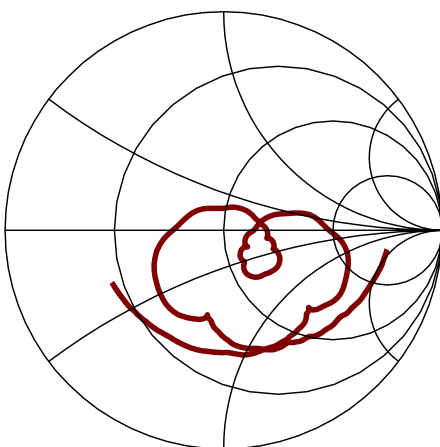
- 77.8 MHz SAW bandpass filter with 3.84 MHz bandwidth.
- 13.3 x 6.5 mm SMP package.
- RoHS compliant.

TYPICAL PERFORMANCE

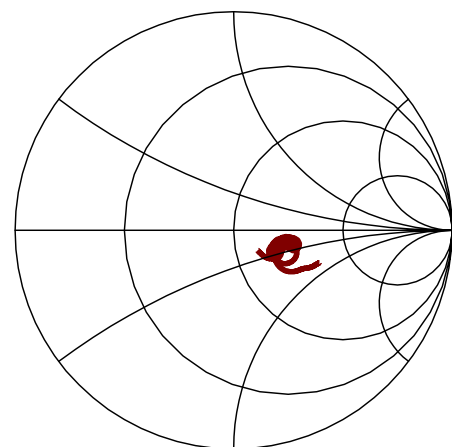


Horizontal: Frequency : 4 MHz/div
 Vertical from Top: Relative Magnitude : 10 dB/div
 Relative magnitude : 1 dB/div
 Phase Linearity : 10 deg/div
 Group Delay : 100 ns/div

S11



S22



SPECIFICATION

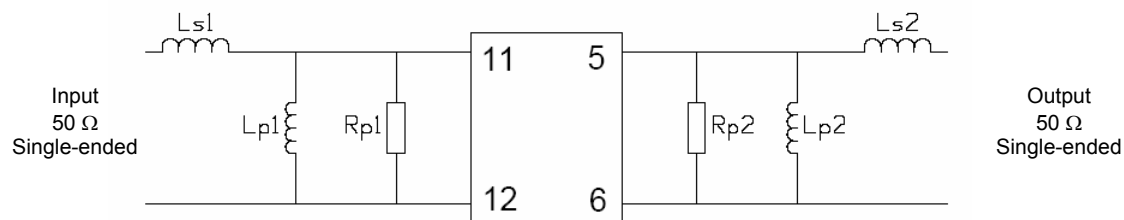
Parameter ²	Min	Typ	Max	Units
Center Frequency (Fc) ¹	-	77.8	-	MHz
Operating Bandwidth	3.84	4.10	-	MHz
Insertion Loss	-	16	17	dB
Amplitude Ripple ³	-	0.8	1	dB p-p
Triple Travel Suppression	35	43	-	dB
Phase Deviation from Linear ³	-	3	8	deg p-p
Group Delay Variation ³	-	50	150	ns p-p
Absolute Delay	-	0.97	-	us
Rejection at Fc+/-3.5 MHz ²	5	7	-	dB
Rejection at Fc+4.4 MHz ²	16	18	-	dB
Rejection ²				
0.3 to 64 MHz	45	56	-	dB
64 to 68 MHz	35	44	-	dB
68 to 72 MHz	30	35	-	dB
84 to 88 MHz	30	34	-	dB
88 to 92 MHz	35	45	-	dB
92 to 120 MHz	45	50	-	dB
120 to 175 MHz	28	32	-	dB
175 to 210 MHz	35	55	-	dB
250 to 500 MHz	45	55	-	dB
Input/Output Return Loss (Fc+/-1.92 MHz)	8	10		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 3.84 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



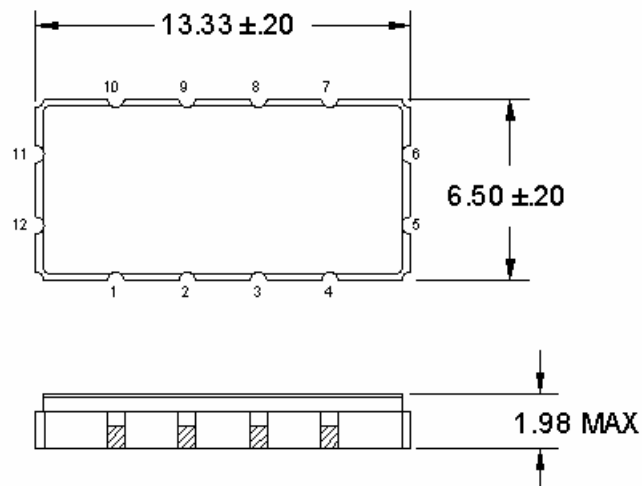
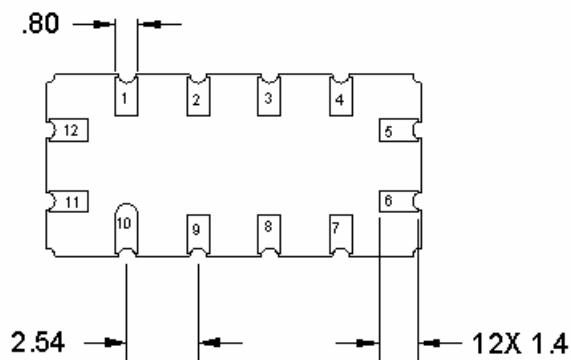
Typical component values:
(Minimum inductor Q = 45)

Ls1 =	180	nH	Ls2 =	1500	nH
Lp1 =	68	nH	Lp2 =	100	nH
Rp1 =	560	Ω	Rp2 =	150	Ω

Notes:

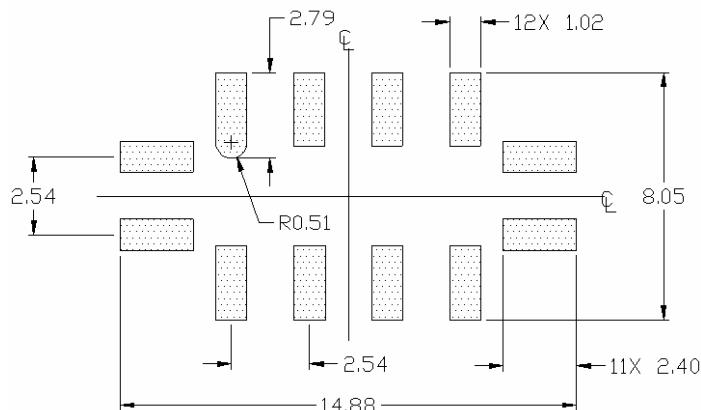
1. Recommend the use of +/-2% tolerance components.
2. Component values shown are for guidance only and may change depending on board layout.

PACKAGE OUTLINE



Package Material:
 Body: Al_2O_3 ceramic
 Lid: Kovar, Ni plated
 Terminations: Au plating 1 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:	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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