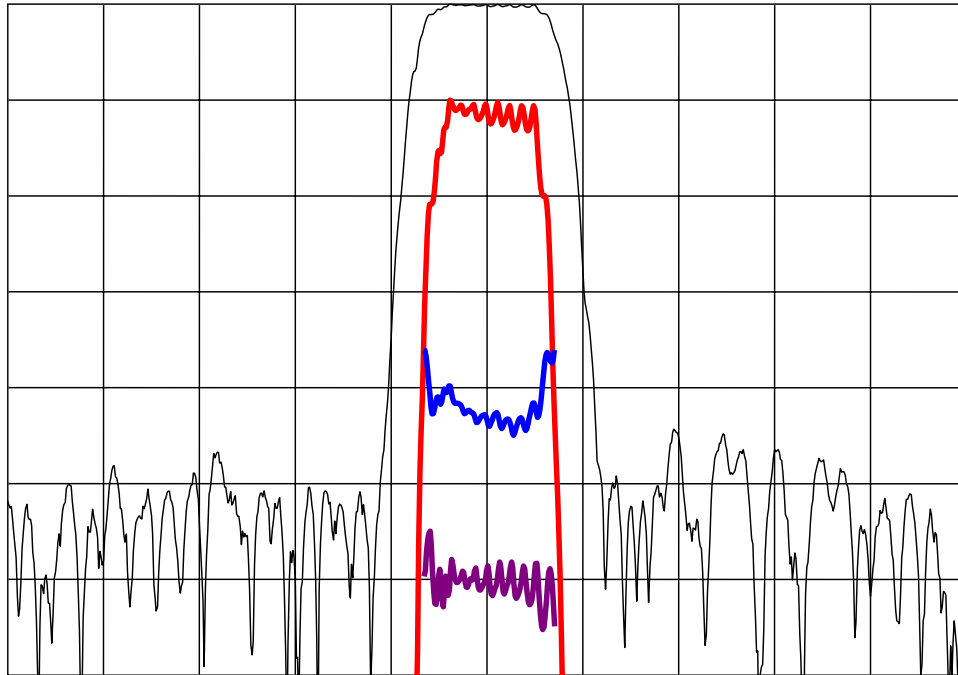


DESCRIPTION

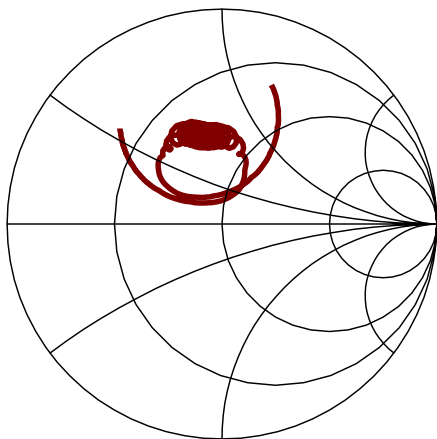
- 300 MHz SAW bandpass filter with 6.8 MHz bandwidth.
- 5 x 7 mm SMP.
- RoHS compliant.

TYPICAL PERFORMANCE

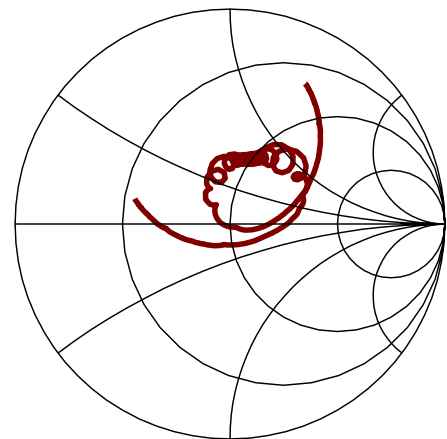


Horizontal: Frequency : 6 MHz/div
 Vertical from Top: Relative Magnitude : 10 dB/div
 Relative magnitude : 1 dB/div
 Phase Linearity : 10 deg/div
 Group Delay Deviation : 100 ns/div

S11 (270 to 330 MHz)



S22 (270 to 330 MHz)



SPECIFICATION

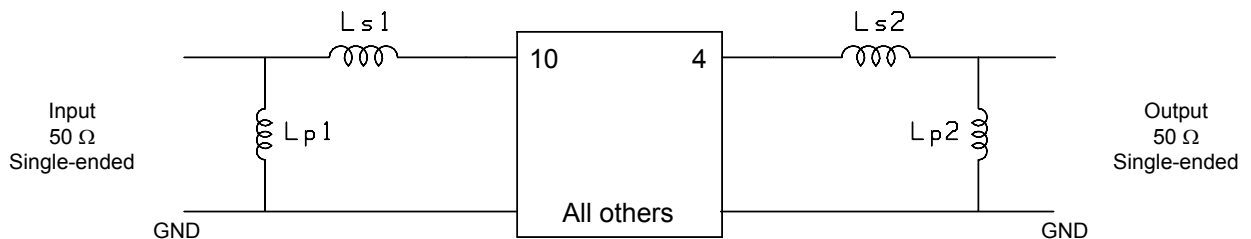
Parameter	Min	Typ	Max	Units
Center Frequency, F_c ¹	-	300.00	-	MHz
Insertion Loss ²	-	10.9	12	dB
1 dB bandwidth	6.80	7.2	-	MHz
3 dB Bandwidth	7.00	8.3	-	MHz
40 dB bandwidth		12.8	14.00	MHz
Amplitude Ripple ($F_c \pm 2.72$ MHz)	-	0.7	1	dB p-p
Group Delay Variation ($F_c \pm 3.4$ MHz)		95	130	ns/div
Rejection (150 MHz to 290 MHz)	43	45	-	dB
Rejection (310 MHz to 360 MHz)	43	45	-	dB
Rejection (360 MHz to 450 MHz)	40	43	-	dB
Temperature Coefficient of Frequency	-	18	-	ppm/°C
Source/Load Impedance	50			ohms
Ambient Temperature	-	25	-	°C

- Notes:
1. Measured as mean of the lower and upper 3 dB band edge frequencies.
 2. Average value of the loss within $F_c \pm 3.4$ MHz.

MAXIMUM RATINGS

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

MATCHING CIRCUIT



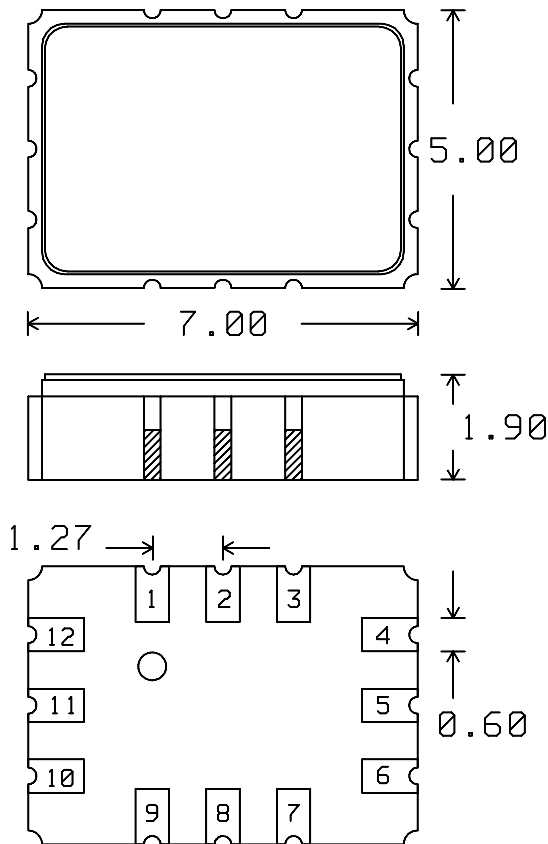
Typical component values:

$$\begin{aligned} L_{s1} &= 3.0 \text{ nH} & L_{s2} &= 3.0 \text{ nH} \\ L_{p1} &= 8.2 \text{ nH} & L_{p2} &= 8.2 \text{ nH} \end{aligned}$$

Notes:

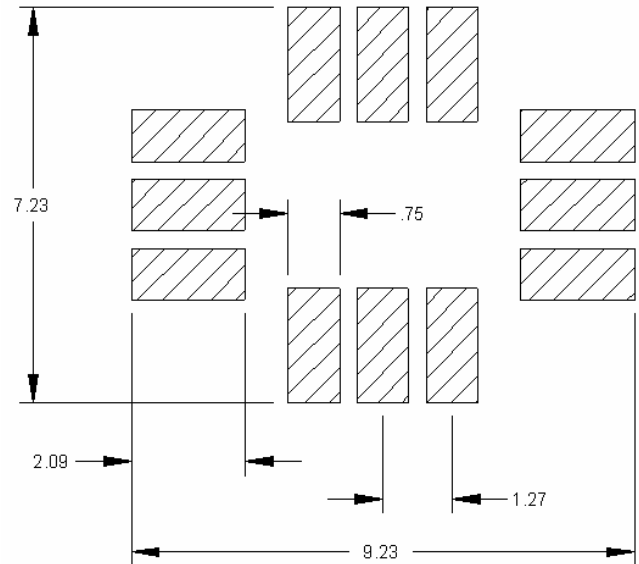
1. Recommend use of 2% tolerance matching components.
2. Component values are for reference only and may change depending on board layout.

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

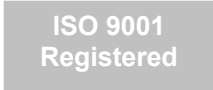


Units: mm

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

Pad Configuration:

Input: 10
Output: 4
Ground: All other pads



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