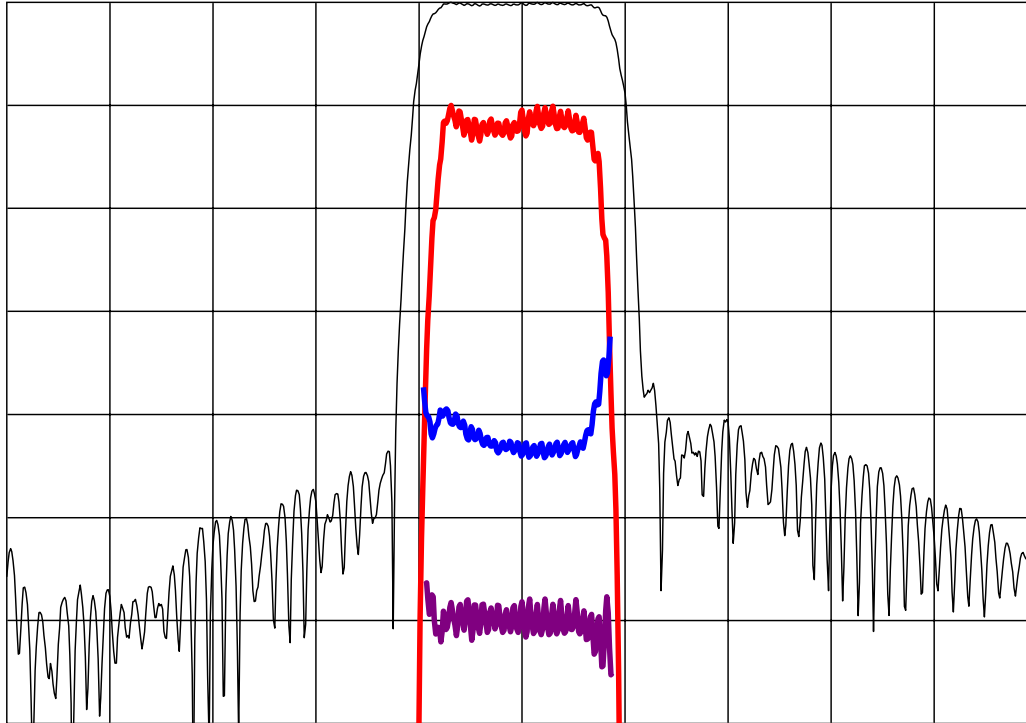


DESCRIPTION

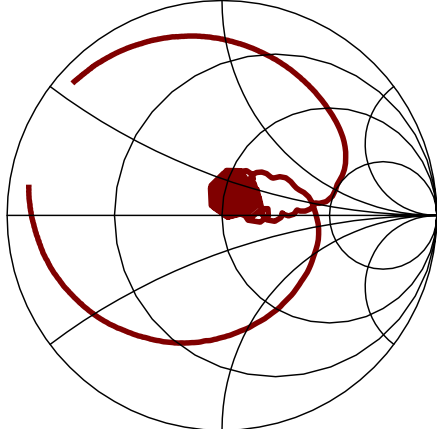
- 300 MHz SAW bandpass filter with 20 MHz bandwidth.
- 5 x 7 mm LCC package.
- RoHS compliant.

TYPICAL PERFORMANCE

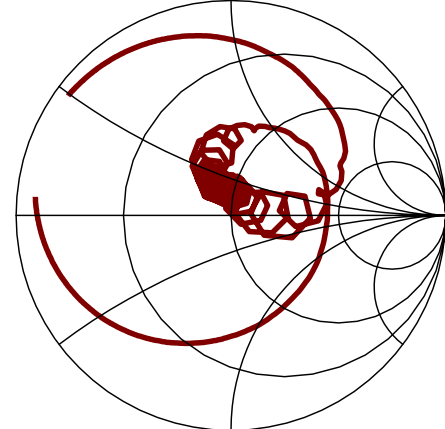


Horizontal: Frequency : 15 MHz/div
 Vertical from Top: Relative Magnitude : 10 dB/div
 Relative magnitude : 1 dB/div
 Phase Linearity : 10 deg/div
 Group Delay Deviation : 50 ns/div

S11 (225-375 MHz)



S22 (225-375 MHz)



SPECIFICATION

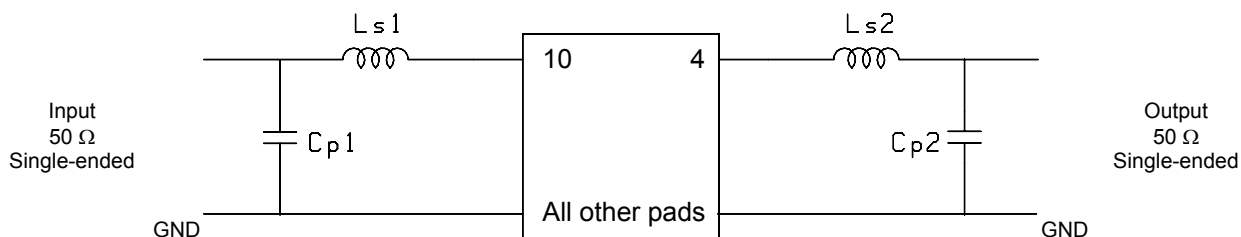
Parameter	Min	Typ	Max	Units
Center Frequency, F_c ¹	-	300.00	-	MHz
Insertion Loss ²	-	7.6	12	dB
1 dB bandwidth	20.0	24.8	-	MHz
3 dB Bandwidth	21.0	27.9	-	MHz
40 dB bandwidth	-	37.8	40.0	MHz
Amplitude Ripple ($F_c \pm 8$ MHz)	-	0.5	0.8	dB p-p
Group Delay Variation ($F_c \pm 10$ MHz)	-	35	100	ns/div
Rejection (150 MHz to 275 MHz)	40	45	-	dB
Rejection (325 MHz to 450 MHz)	40	42	-	dB
Temperature Coefficient of Frequency	-	-94	-	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. Minimum loss within the passband.

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



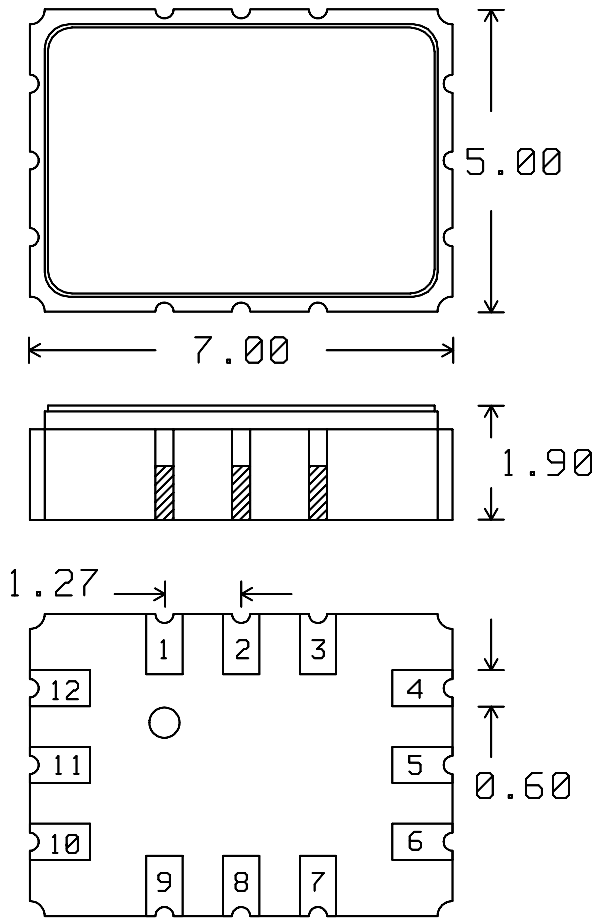
Typical component values:

$$\begin{array}{ll} L_{s1} = 22 \text{ nH} & L_{s2} = 22 \text{ nH} \\ C_{p1} = 15 \text{ pF} & C_{p2} = 15 \text{ pF} \end{array}$$

Notes:

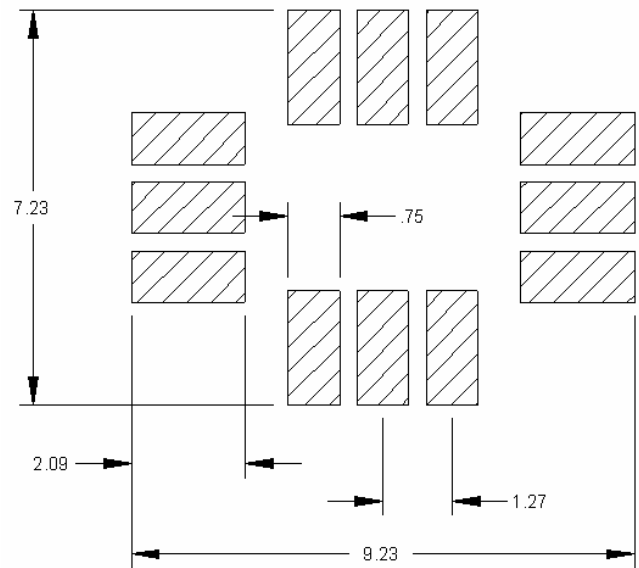
1. Recommend use of 2% tolerance matching components.
2. Component values are for reference only and may change depending on board layout.

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

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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