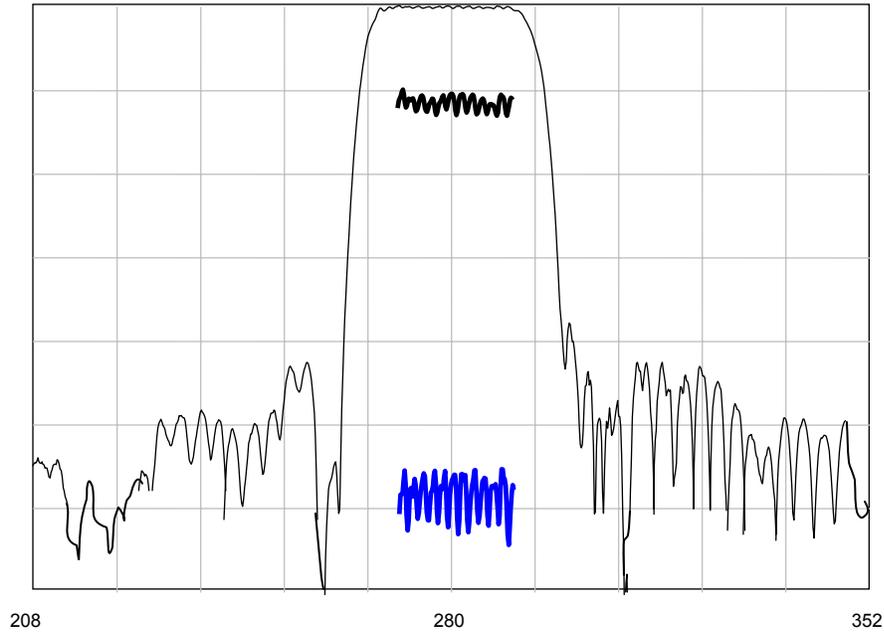


DESCRIPTION

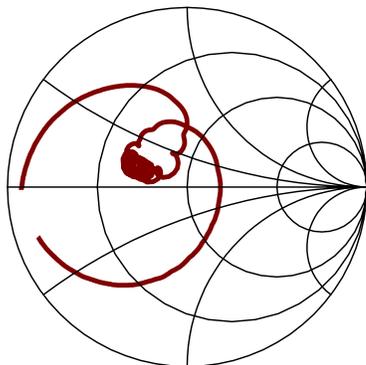
- 280 MHz SAW bandpass filter with 17 MHz of useable bandwidth in 5 x 5 mm LCC.
- RoHS compliant.

TYPICAL PERFORMANCE

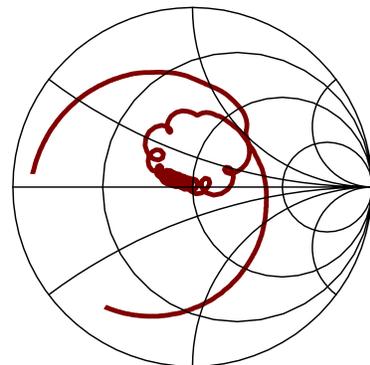


Vertical from top: Relative Magnitude : 10 dB/div
 Relative magnitude : 1 dB/div
 Group Delay Deviation : 25 ns/div

S11 (Input)



S22 (Output)



SPECIFICATION

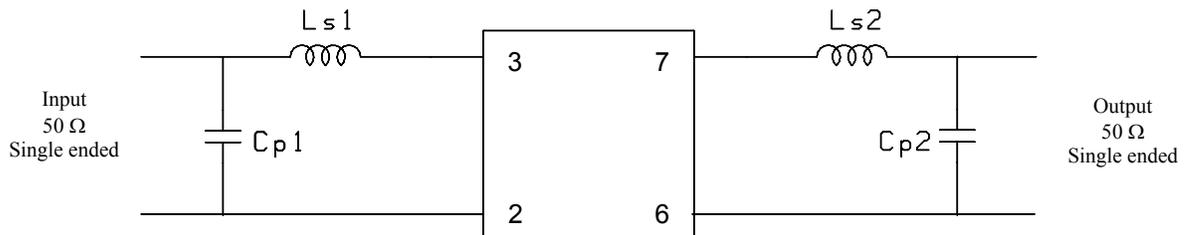
Parameter	Min	Typ	Max	Units
Measured Center Frequency F_C ¹	279.50	280.00	280.50	MHz
Insertion Loss	-	8.6	10.0	dB
1 dB Bandwidth ²	-	17.0	-	MHz
3 dB Bandwidth ²	20.0	24.3	-	MHz
10 dB Bandwidth ²		27.9	30.0	MHz
15 dB Bandwidth ²		29.2	34.0	MHz
40 dB Bandwidth	-	-	200	MHz
Amplitude Ripple (271.5 to 288.5 MHz)		0.6	1.0	dB p-p
Group Delay Variation (271.5 to 288.5 MHz)		80	100	ns p-p
Rejection:				
30 to F_C -100 MHz	40	54	-	dB
F_C -100 to F_C -17 MHz	15	38	-	dB
F_C -17 to F_C -15 MHz	10	23	-	dB
F_C +15 to F_C +17 MHz	10	15	-	dB
F_C +17 to F_C +100 MHz	15	31	-	dB
F_C +100 to 500 MHz	40	54	-	dB
Temperature Coefficient of frequency		-90		ppm/°C
Ambient Temperature		25		°C

- Notes:
1. Defined as the average of the lower and upper 3 dB frequencies.
 2. All dB levels are defined relative to the insertion loss.

MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	°C
Operating Temperature Range	20	30	°C
Input Power Level		10	dBm

MATCHING CIRCUIT



Typical component values:
(Minimum inductor Q=40)

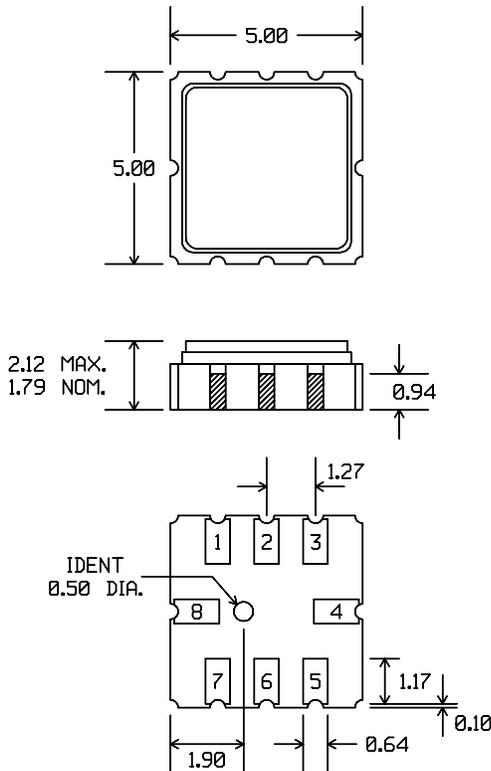
$$\begin{aligned} L_{s1} &= 58 \text{ nH} \\ C_{p1} &= 17 \text{ pF} \end{aligned}$$

$$\begin{aligned} L_{s2} &= 52 \text{ nH} \\ C_{p2} &= 13 \text{ pF} \end{aligned}$$

Notes:

1. Recommend use of 2% tolerance components.
2. Values shown here are intended as a guide only. Component values may change depending on board layout.

PACKAGE OUTLINE



Units: mm

Dimensions are nominal in mm. All tolerances are ± 0.15 mm except overall length and width and pad tolerances.

Pad Configuration:

Input:	3
Input Return:	2
Output:	7
Output Return:	6
Ground:	1,4,5,8

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

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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