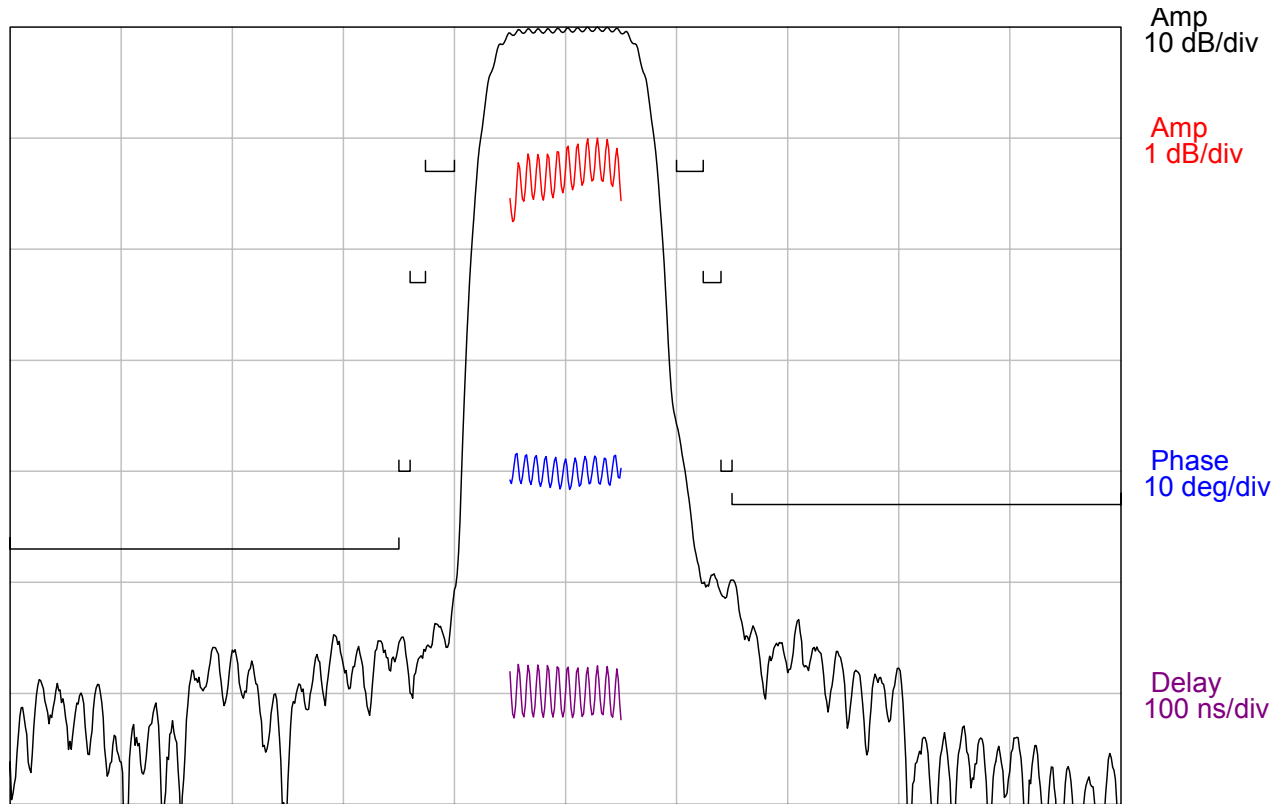


DESCRIPTION

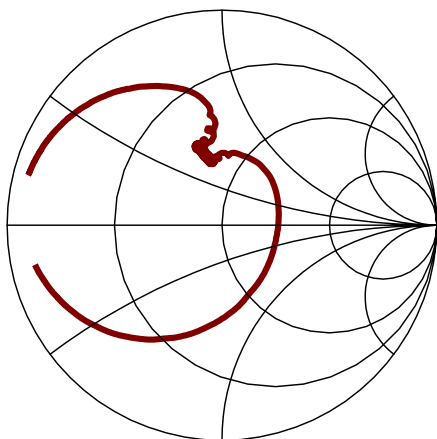
- 249.6 MHz SAW bandpass filter with 10 MHz bandwidth.
- 9.1 x 4.8 mm ceramic LCC package.
- RoHS compliant.

TYPICAL PERFORMANCE

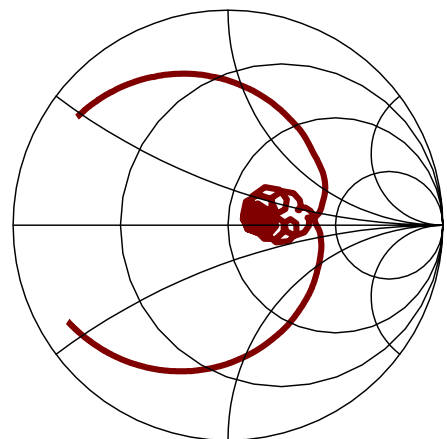


Center = 249.6 MHz, 10 MHz/div (125 kHz incr)

S11 (199.6-299.6 MHz)



S22 (199.6-299.6 MHz)



SPECIFICATION

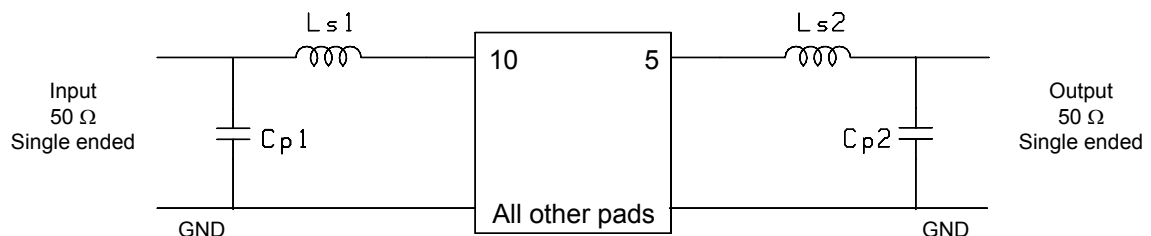
Parameter	Min	Typ	Max	Units
Center Frequency, F_c ¹	-	249.6	-	MHz
Insertion Loss	-	10.8	13.5	dB
Amplitude variation (244.6 to 254.6 MHz)	-	0.7	1	dB p-p
Phase Linearity (244.6 to 254.6 MHz)	-	1	4	deg RMS
Absolute Delay	-	570	-	ns
Lower 1dB Band Edge ²	-	243.89	244.6	MHz
Upper 1dB Band Edge ²	254.6	255.18	-	MHz
Relative Attenuation (149.6 to 234.6 MHz) ²	47	53	-	dB
Relative Attenuation (234.6 to 235.6 MHz) ²	40	55	-	dB
Relative Attenuation (235.6 to 237 MHz) ²	23	55	-	dB
Relative Attenuation (237 to 239.6 MHz) ²	13	48	-	dB
Relative Attenuation (259.6 to 262 MHz) ²	13	35	-	dB
Relative Attenuation (262 to 263.6 MHz) ²	23	47	-	dB
Relative Attenuation (263.6 to 264.6 MHz) ²	40	47	-	dB
Relative Attenuation (264.6 to 349.6 MHz) ²	43	55	-	dB
Source and Load Impedance	50			ohms
Temperature Coefficient of Frequency	-18			ppm/°C
Ambient Temperature	-	25	-	°C

- Notes: 1. Reference frequency. Computed as mean of the 3 dB frequencies.
2. All dB values are referenced to the insertion loss value.

MAXIMUM RATINGS

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

MATCHING CIRCUIT



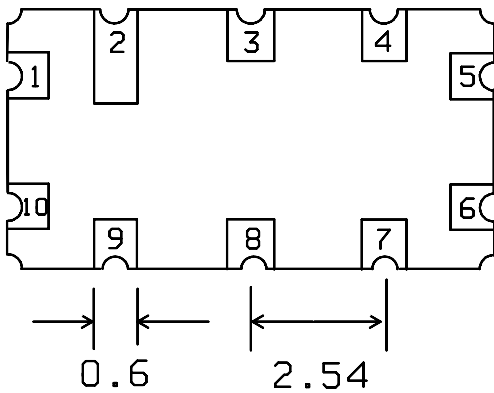
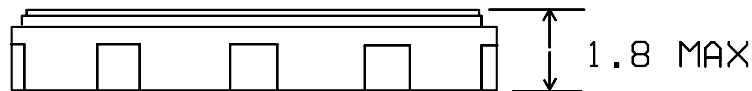
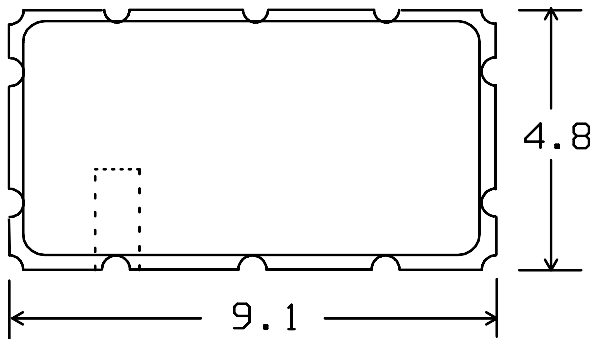
$$L_{s1} = 39 \text{ nH} \quad L_{s2} = 33 \text{ nH}$$

$$C_{p1} = 27 \text{ pF} \quad C_{p2} = 22 \text{ pF}$$

Notes:

- Recommend 2% or better tolerance matching components. Typical inductor $Q=40$.
- Optimum values may change depending on board layout. Values shown are intended as a guide only.

PACKAGE OUTLINE



Units: mm

Tolerances are typically ± 0.15 mm except where indicated.

Pad Configuration:

Input: 10
Output: 5
Ground: All other pads

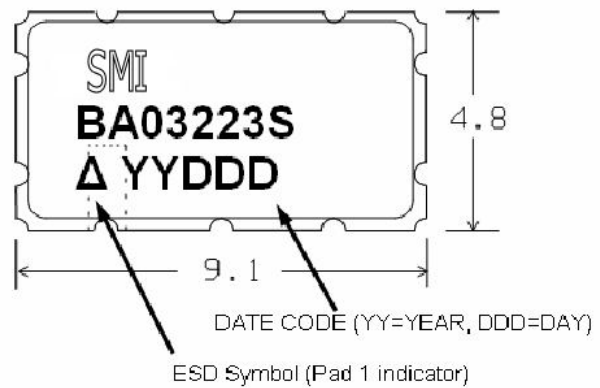
Package Material:

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

MARKING



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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