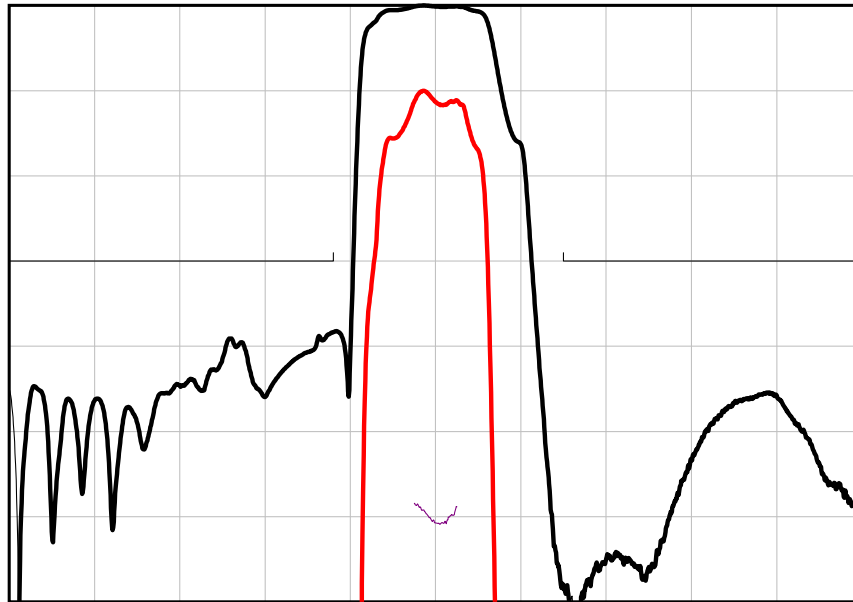


## DESCRIPTION

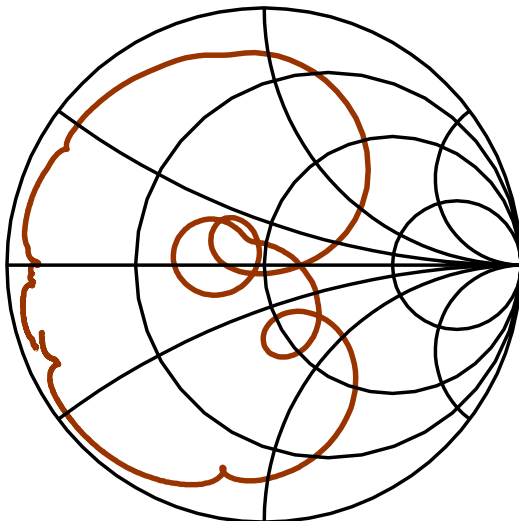
- 1090 MHz SAW bandpass filter with 20 MHz bandwidth.
- 3 x 3 mm ceramic LCC package.
- RoHS compliant.

## TYPICAL PERFORMANCE

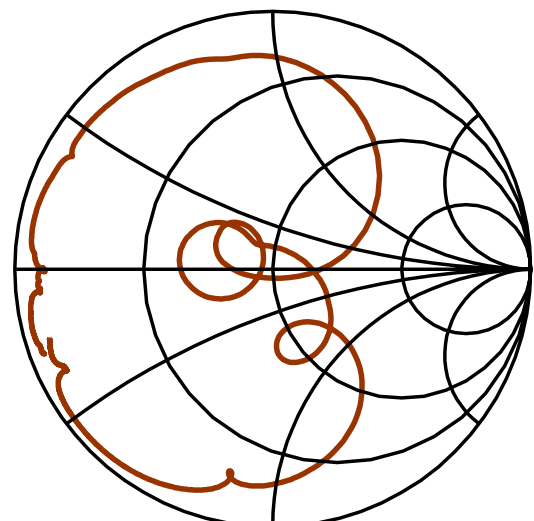


Horizontal:	Frequency:	20	MHz/div
	Relative Magnitude:	10	dB/div
	Relative Magnitude:	1	dB/div
	Group Delay:	25	ns/div

**S11 (990-1190 MHz)**



**S22 (990-1190 MHz)**



## SPECIFICATION

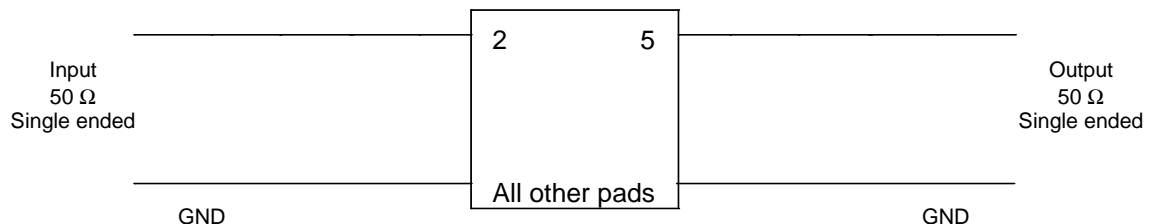
Parameter	Min	Typ	Max	Units
Center Frequency, $F_c$ <sup>1</sup>	-	1090	-	MHz
Insertion Loss	-	2.8	3.7	dB
Pass Band Ripple (1085 to 1095 MHz)	-	0.5	1	dB p-p
Group Delay Variation (1085 to 1095 MHz)	-	15	25	ns p-p
1 dB Bandwidth <sup>2</sup>	20	22	-	MHz
Lower 1 dB Frequency	-	1079	1080	MHz
Upper 1 dB Frequency	1100	1101	-	MHz
Attenuation (10 to 1066 MHz) <sup>2</sup>	30	38	-	dB
Attenuation (1120 to 1600 MHz) <sup>2</sup>	30	45	-	dB
Input/Output Return Loss at $F_c$	8	19	-	dB
Source and Load Impedance	50			ohms
Temperature Coefficient of Frequency	-35			ppm/°
Ambient Temperature	25			°C

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

## MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-55	+125	°C
Operating Temperature Range	-55	+125	°C
Input Power Level	-	15	dBm

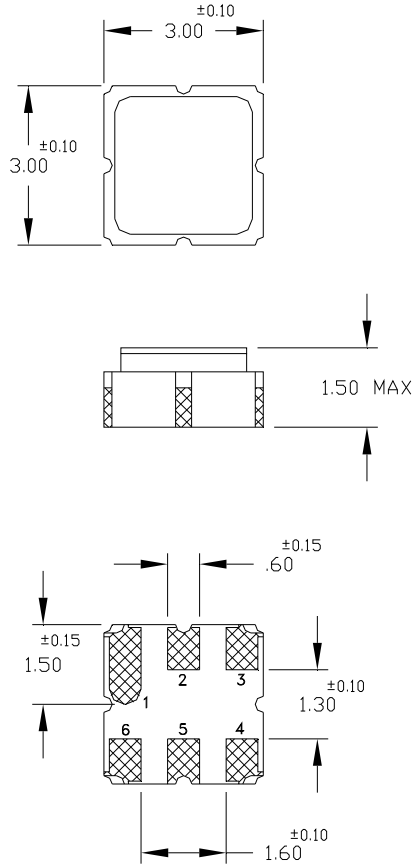
## MATCHING CIRCUIT



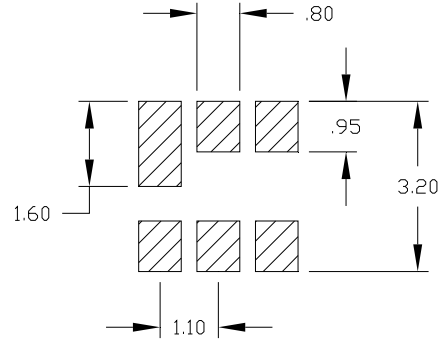
Notes:

- Matching components are not required.

**PACKAGE OUTLINE**



**SUGGESTED FOOTPRINT**



Package Material:  
Body:  $Al_2O_3$  ceramic  
Lid: Kovar, Ni plated  
Terminations: Au plating 1  $\mu$ m min, over a 1.3-8.9  $\mu$ m Ni plating

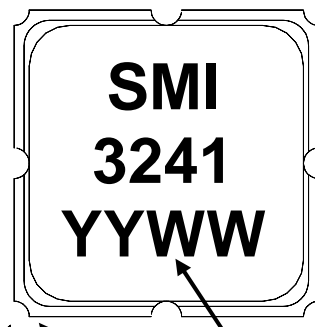
Units: mm

Tolerances are typically  $\pm 0.15$  mm except where indicated.

**Pad Configuration:**

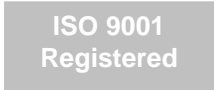
Input: 2  
Output: 5  
Ground: All other pads

**MARKING**



1 → DATE CODE (YEAR, WEEK)

→ LONG PAD ON BOTTOM OF THIS CORNER



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