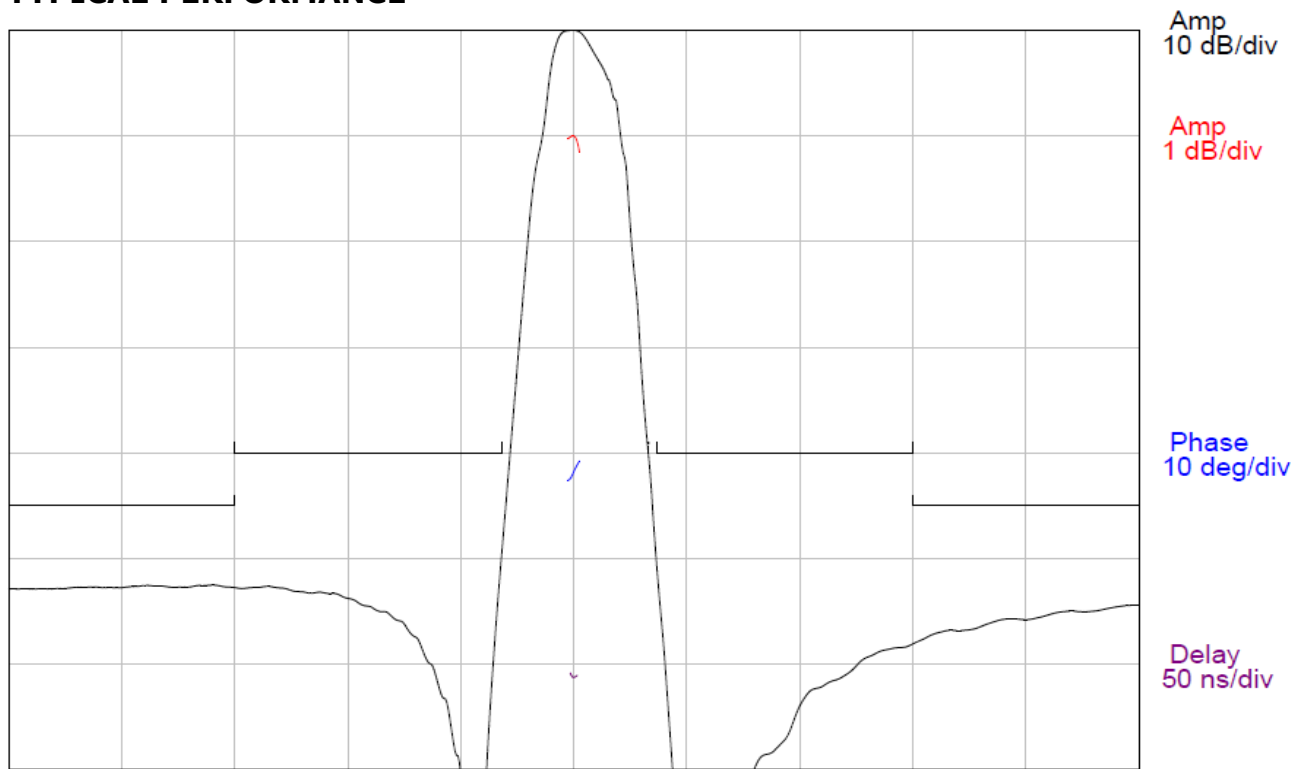


## DESCRIPTION

- 291.4 MHz Filter with 1 MHz Bandwidth
- 5 x 5 mm Ceramic LCC Package, 8 Pads
- RoHS compliant

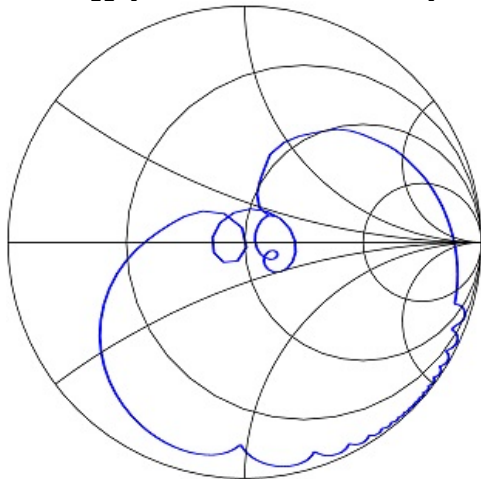
## SIMULATION

## TYPICAL PERFORMANCE

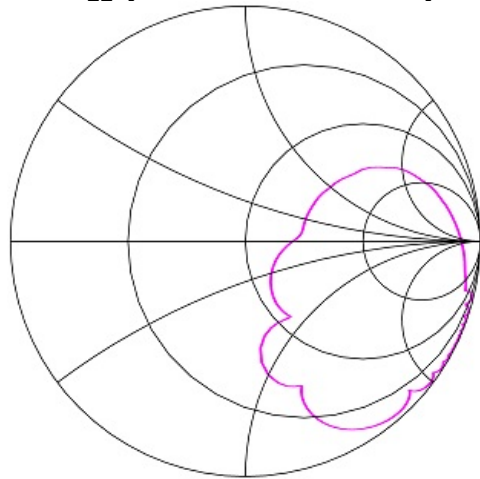


Center = 291.4 MHz, 10 MHz/div (125 kHz incr)

**S<sub>11</sub> (261.4-321.4 MHz)**



**S<sub>22</sub> (261.4-321.4 MHz)**



## SPECIFICATION

Parameter	Min	Type	Max	Units
Center Frequency, Fc, 1 dB)	---	291.4	---	MHz
Insertion Loss	---	3.1	5	dB
1 dB Bandwidth <sup>1</sup>	1	2.62	---	MHz
Lower 1 dB Frequency <sup>1</sup>	---	289.95	291.2	MHz
Upper 1 dB Frequency <sup>1</sup>	291.8	292.57	---	MHz
35 dB Bandwidth <sup>1</sup>	---	11.43	12.2	MHz
Amplitude Ripple (Fc $\pm$ 0.3 MHz)	---	0.25	1	dB p-p
Group Delay Variation (Fc $\pm$ 0.3 MHz)	---	60	100	ns p-p
Rejection (10-261 MHz) <sup>1</sup>	45	50	---	dB
Rejection (261-285 MHz) <sup>1</sup>	40	46	---	dB
Rejection (299.5-321 MHz) <sup>1</sup>	40	43	---	dB
Rejection (321-350 MHz) <sup>1</sup>	45	48	---	dB
Material Temperature Coefficient	-35			ppm/°C
Source and Load Impedance	50			ohms
Ambient Temperature	25			°C

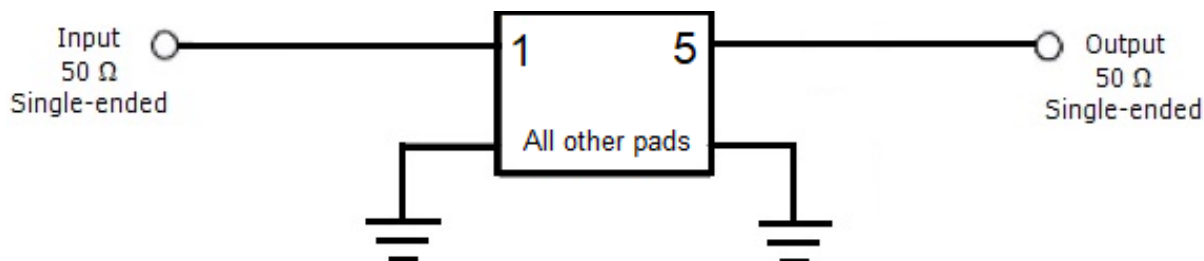
Notes: 1. Parameter value is referenced to the insertion loss value.  
2. Part is to operate in a 50 ohm single-ended system.

## MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	100	°C
Operating Temperature Range	-20	55	°C
Input Power Level	+28	+34**	dBm

\*\* to be verified

## CIRCUIT



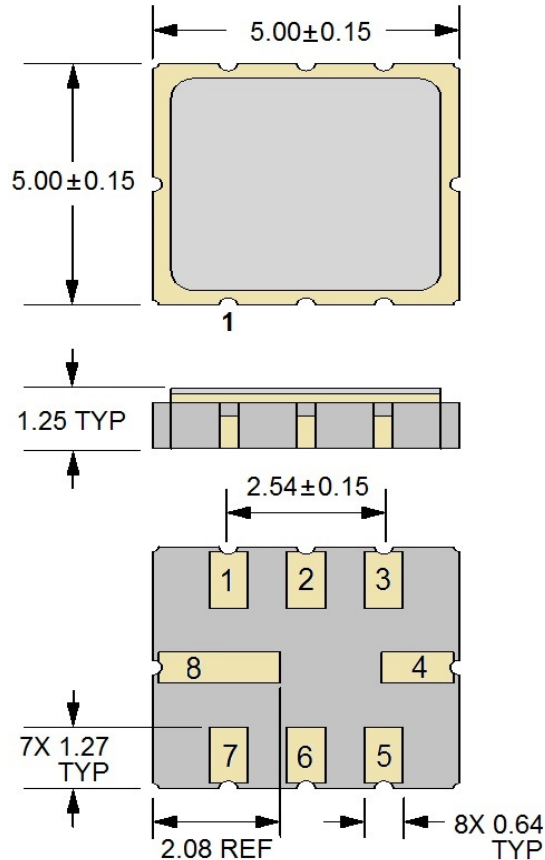
## SIMULATION

Notes:

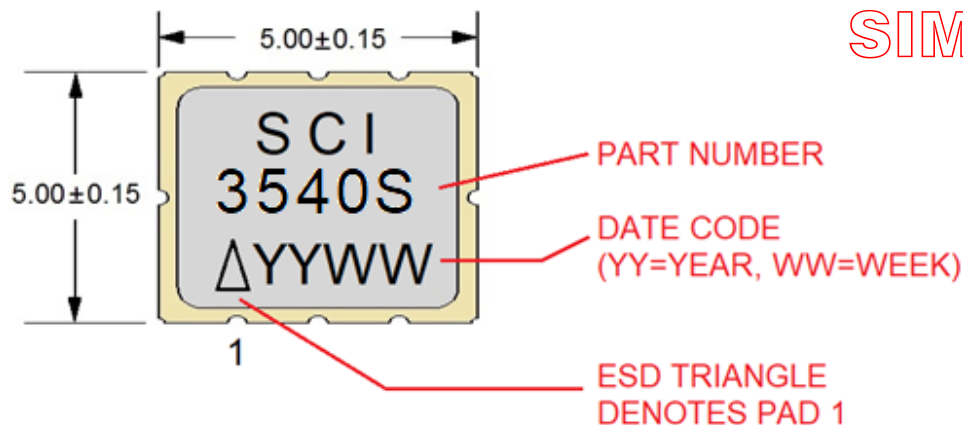
- 1) Matching components are not required.
- 2) Recommended operation is in a 50 ohm system.

**HIGH POWER SAW FILTER**

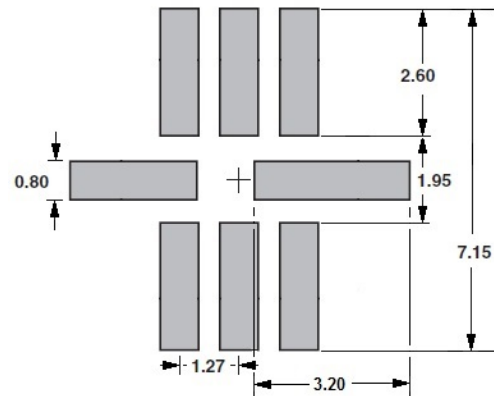
**PACKAGE OUTLINE**



**MARKING**



**SUGGESTED FOOTPRINT**



Typical tolerances are  $\pm 0.15$  mm except where indicated.

**Pad Configuration:**

Input: 1  
Output: 5  
Ground: All other pads

**Package Material:**

Body:  $\text{Al}_2\text{O}_3$  ceramic  
Lid: Kovar, Ni plated  
Terminations: Au plating 1  $\mu\text{m}$  min,  
over a 1.3-8.9  $\mu\text{m}$  Ni plating

**SIMULATION**

ISO 9001  
Registered

All specifications are believed to be accurate and reliable. However, Spectrum Control reserves the right to make changes without notice.  
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**Spectrum Control, Inc.**  
400 Nickerson Road, Marlborough, MA 01752, USA • Phone 508-251-6400 • Fax 508-251-6401  
[spectrumcontrol.com](http://spectrumcontrol.com)

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