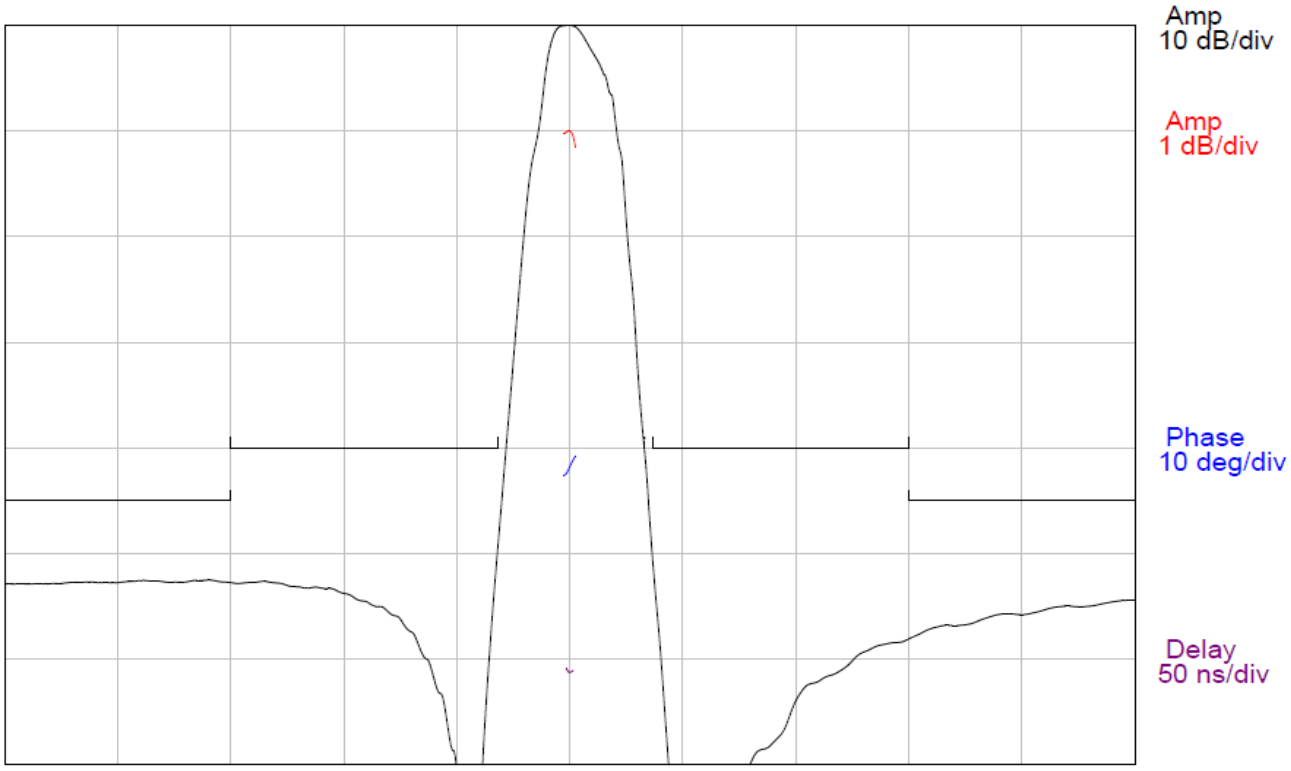
SF0291HP03540S

291.4 MHz SAW Filter
1 MHz Bandwidth

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

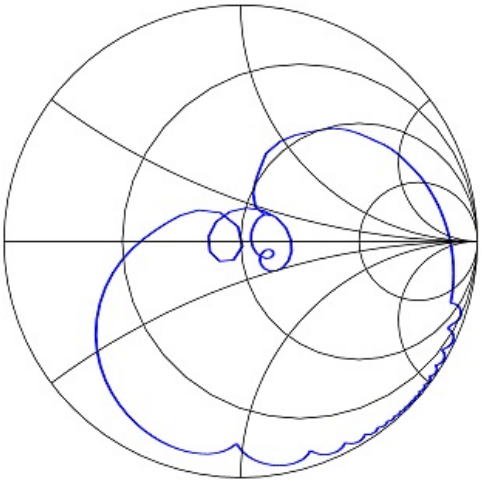
SIMULATION

TYPICAL PERFORMANCE

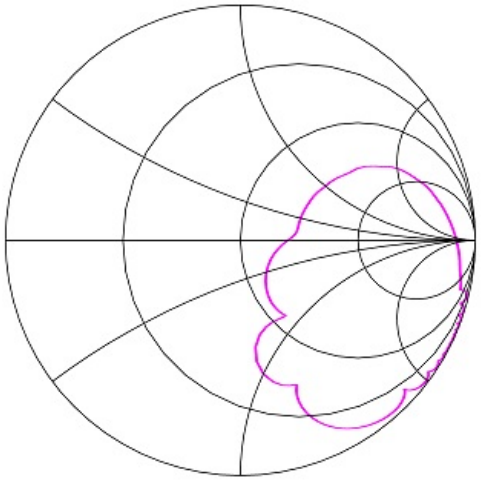


Center = 291.4 MHz, 10 MHz/div (125 kHz incr)

S_{11} (261.4-321.4 MHz)



S_{22} (261.4-321.4 MHz)



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Approved for Release: June 2025/Brown

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SPECIFICATION

Parameter	Min	Type	Max	Units
Center Frequency, Fc, 1 dB)	---	291.4	---	MHz
Insertion Loss	---	3.1	5	dB
1 dB Bandwidth[1]	1	2.62	---	MHz
Lower 1 dB Frequency[1]	---	289.95	291.2	MHz
Upper 1 dB Frequency[1]	291.8	292.57	---	MHz
35 dB Bandwidth[1]	---	11.43	12.2	MHz
Amplitude Ripple (Fc ±0.3 MHz)	---	0.25	1	dB p-p
Group Delay Variation (Fc ±0.3 MHz)	---	60	100	ns p-p
Rejection (10-261 MHz)[1]	45	50	---	dB
Rejection (261-285 MHz)[1]	40	46	---	dB
Rejection (299.5-321 MHz)[1]	40	43	---	dB
Rejection (321-350 MHz)[1]	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.

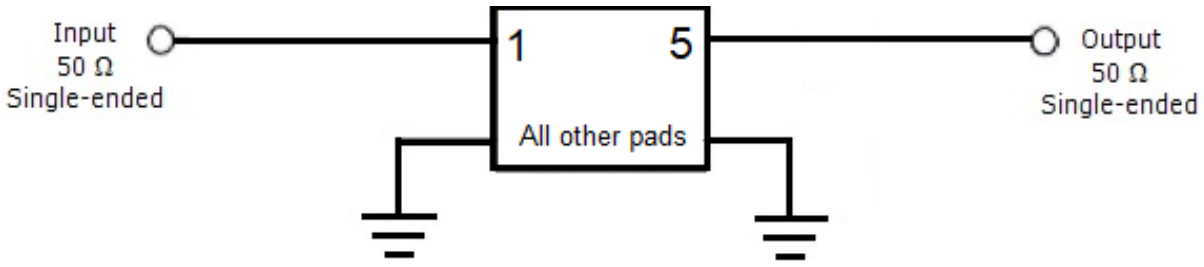
MAXIMUM RATINGS

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.

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SPECTRUM CONTROL

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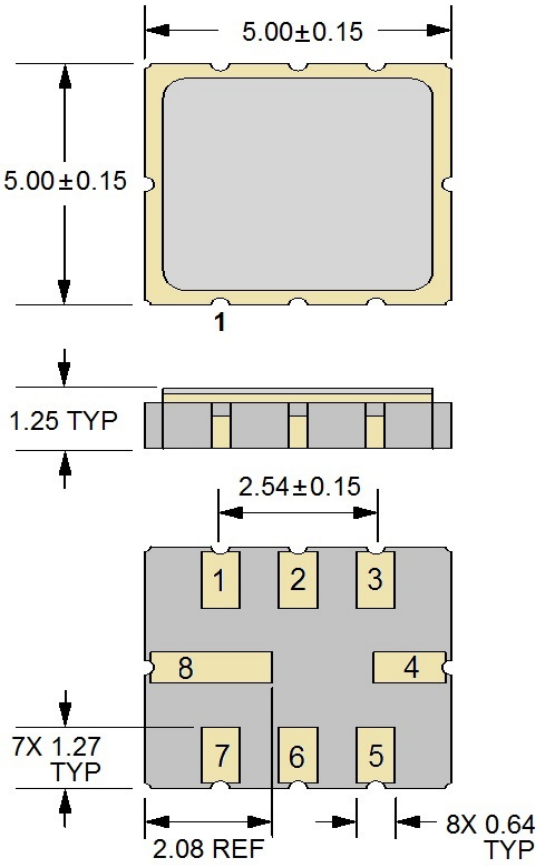
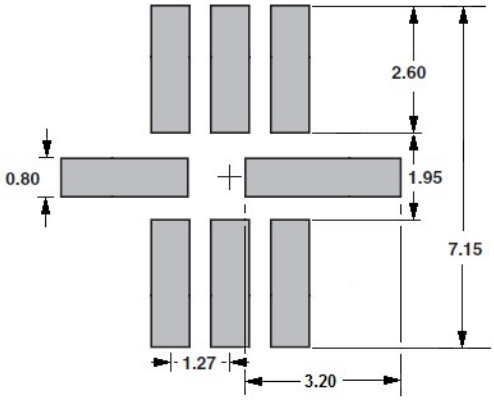
1 MHz Bandwidth

PACKAGE OUTLINE



SUGGESTED FOOTPRINT



Typical tolerances are ±0.15 mm except where indicated.

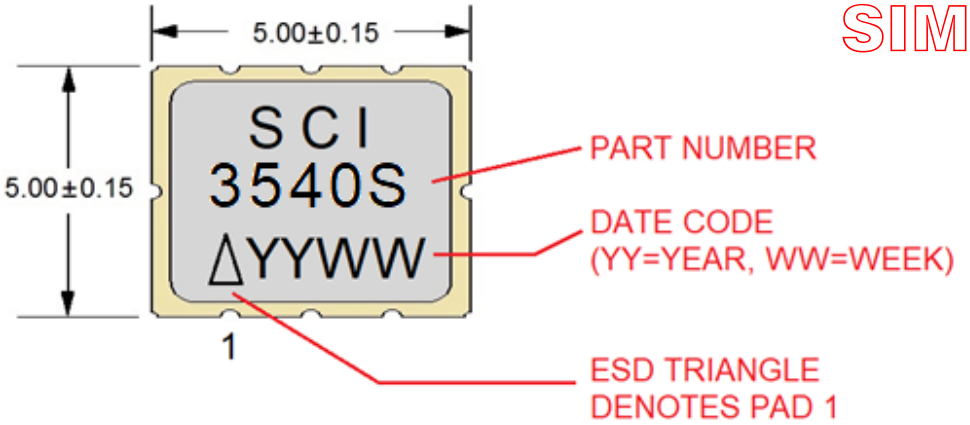
Pad Configuration:

Input:	1
Output:	5
Ground:	All other pads

Package Material:

Body: Al_2O_3 ceramic
Lid: Kovar, Ni plated
Terminations: Au plating 1 um min, over a 1.3-8.9 um Ni plating

MARKING



SIMULATION

ISO 9001
Registered

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SPECTRUM CONTROL