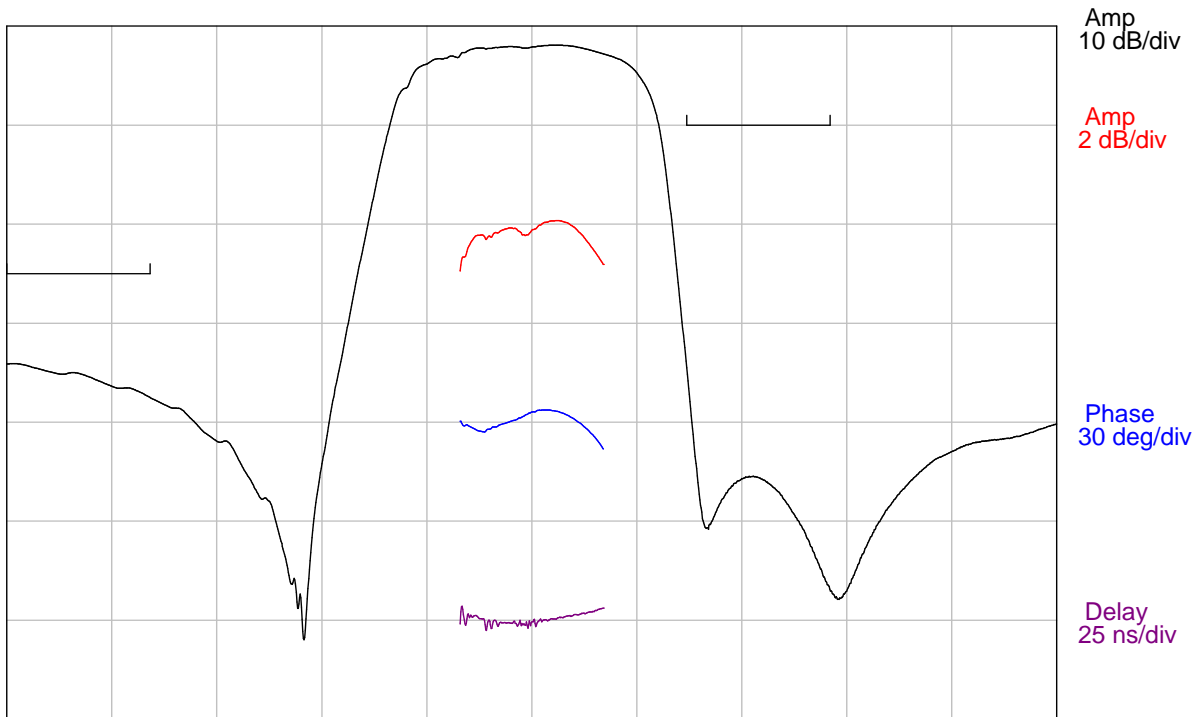


**DESCRIPTION**

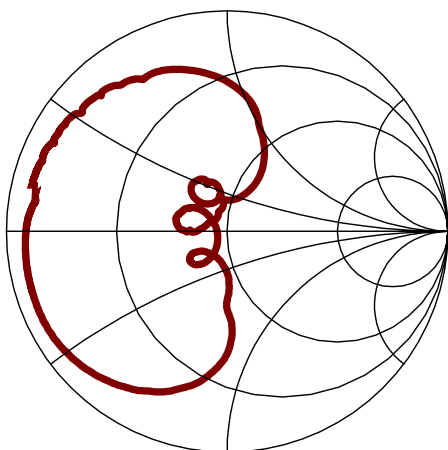
- 2140 MHz SAW bandpass filter with 60 MHz bandwidth for mobile communications.
- 2 x 2.5 mm ceramic LCC, 4 pads.
- RoHS compliant.

**TYPICAL PERFORMANCE**

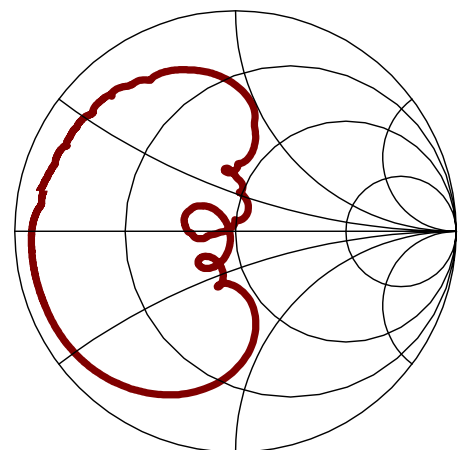


Center = 2140 MHz, 44 MHz/div (275 kHz incr)

**S11 (1920 to 2360 MHz)**



**S22 (1960 to 2360 MHz)**



## SPECIFICATION

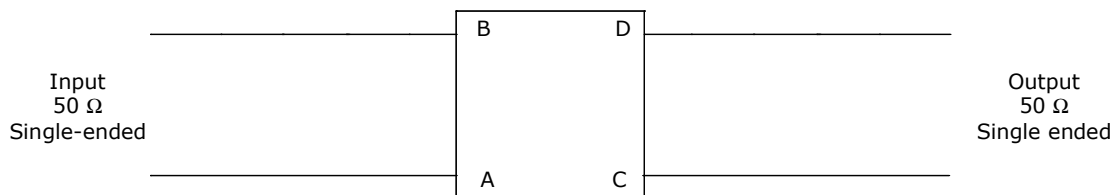
Parameter	Min	Typ	Max	Units
Center Frequency (Fc) <sup>1</sup>	-	2140	-	MHz
Insertion Loss (2110 to 2170 MHz)	-	2.4	3.5	dB
Amplitude Ripple (2110 to 2170 MHz)	-	1.0	1.8	dB p-p
Attenuation (1920 to 1980 MHz) <sup>2</sup>	25	33	-	dB
Attenuation (2205 to 2265 MHz) <sup>2</sup>	10	35	-	dB
Attenuation (2300 to 2360 MHz) <sup>2</sup>	30	39	-	dB
Attenuation (2490 to 2550 MHz) <sup>2</sup>	30	37	-	dB
Attenuation (2870 to 2930 MHz) <sup>2</sup>	30	41	-	dB
Attenuation (4220 to 4340 MHz) <sup>2</sup>	20	34	-	dB
Input VSWR (2110 to 2170 MHz)	-	1.5	2.3	:1
Output VSWR (2110 to 2170 MHz)	-	1.5	2.3	:1
Ambient Temperature	-	25	-	°C
System Source and Load Impedance	-	50	-	Ω

- Notes: 1. Average of lower & upper 3 dB frequencies.  
2. Reference level from 0 dB.

## MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	°C
Operating Temperature Range	-20	75	°C
Input Power Level	-	5	dBm
DC Voltage	-	0	V

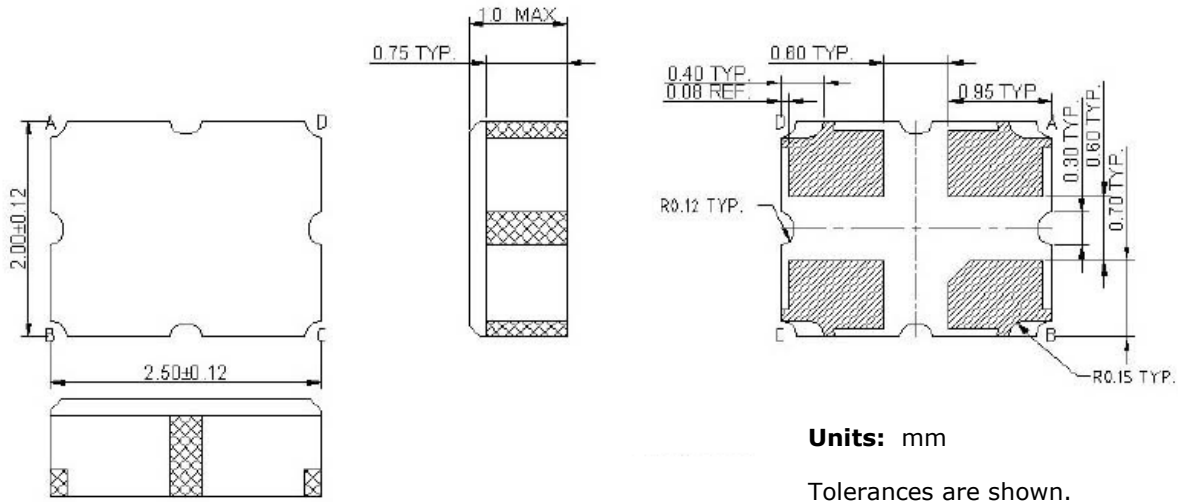
## MATCHING CIRCUIT



Notes:

- 50 ohms, single ended.
- Matching components are not required

**PACKAGE OUTLINE**



**Units:** mm

Tolerances are shown.

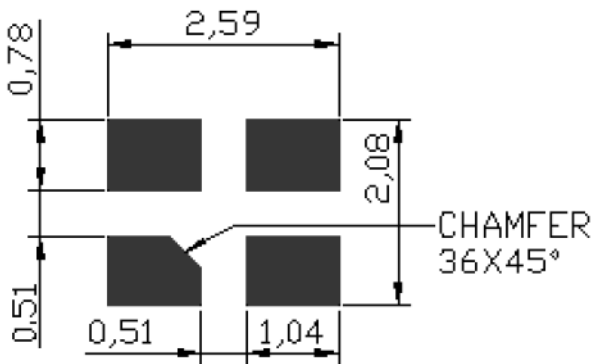
**Pad Configuration:**

Input	B
Output	D
Ground	A, C

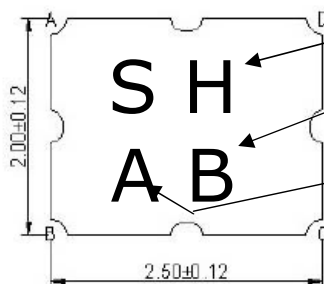
**Package Material:**

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

**SUGGESTED FOOTPRINT**



**MARKING**



Model Identification: SH = SF2140BA02540S

Week Code: A through Z followed by a through z equals 52 weeks.

Year Code: A = 2011, B=2012, C=2013, to J=2020 (Code A through J repeats every 10 years)

**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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