802.5 MHz SAW Filter 8 MHz Bandwidth Part Number SF0802HP03520S

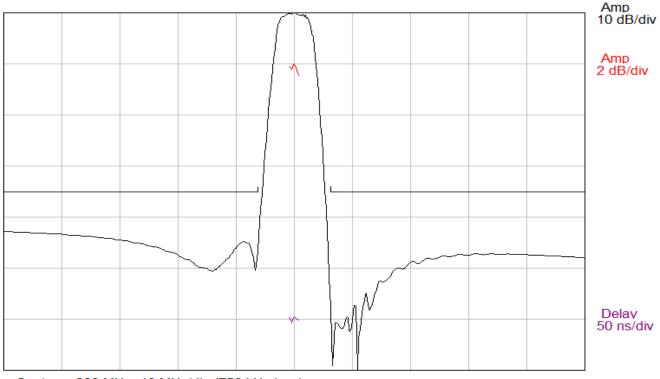
HIGH POWER SAW FILTER

#### **DESCRIPTION**

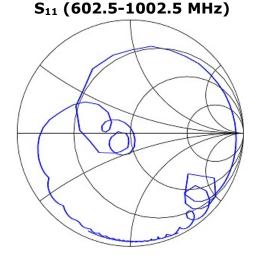
- 802.5 MHz Filter with 8 MHz Bandwidth
- 3.8 x 3.8 mm Ceramic LCC Package, 8 Pads
- RoHS compliant

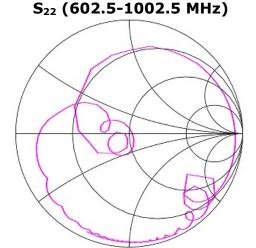
# SIMULATION

## **TYPICAL PERFORMANCE**



Center = 800 MHz, 40 MHz/div (750 kHz incr)





Spectrum Control, Inc.
400 Nickerson Road, Marlborough, MA 01752, USA • Phone 508-251-6400 • Fax 508-251-6401

spectrumcontrol.com



## HIGH POWER SAW FILTER

### **SPECIFICATION**

Parameter	Min	Туре	Max	Units
Minimum Insertion Loss <sup>1</sup>		2.12	3.8	dB
Device Delay		0.037		µsec
2 dB bandwidth <sup>1</sup>	7	21.17		MHz
Center frequency (Fc, 3 dB) <sup>1</sup>		799.87		MHz
3 dB Bandwidth <sup>1</sup>	8	23.15		MHz
Lower 40 dB Frequency <sup>1</sup>	775	777.65		MHz
Upper 40 dB frequency <sup>1</sup>		821.09	825	MHz
Amplitude Ripple (799-806 MHz)		0.44	2	dB p-p
Group Delay Ripple (799-806 MHz)		5		ns p-p
Rejection (600-778.5 MHz) <sup>1</sup>	35	42.9		dB
Rejection (825.5-1000 MHz) <sup>1</sup>	35	47.2		dB
Input Return Loss (799-806 MHz) <sup>2</sup>	8	13.1		dB
Output Return Loss (799-806 MHz) <sup>2</sup>	8	13.1		dB
Material Temperature Coefficient	-40		ppm/°C	
Source and Load Impedance	50			ohms
Ambient Temperature	25			°C

Notes:

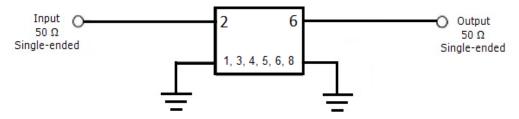
- 1. Parameter value is referenced to the insertion loss value.
- 2. Part is to operate in a 50 ohm single-ended system.

### **MAXIMUM RATINGS**

Parameter	Min	Max	Units
Storage Temperature Range	-55	125	°C
Input Power Level	+24	+33	dBm

### **CIRCUIT**

## SIMULATION



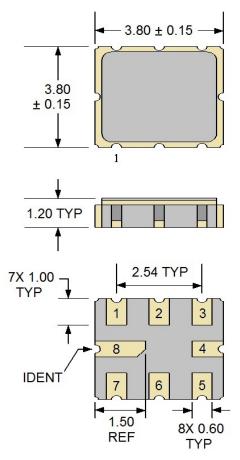
### Notes:

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



## HIGH POWER SAW FILTER

### **PACKAGE OUTLINE**



Units: mm

Typical tolerances are  $\pm 0.15~\text{mm}$  except where indicated.

## **Pad Configuration:**

Input: 2 Output: 6

Ground: All other pads

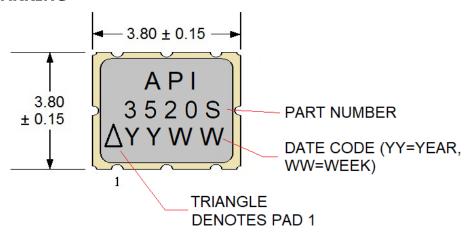
## Package Material:

Body: Al<sub>2</sub>O<sub>3</sub> ceramic Lid: Kovar, Nr plated

Terminations: Au plating 1 µm min, over a 1.3-8.9 µm Ni plating

SIMULATION

#### **MARKING**



ISO 9001 Registered

All specifications are believed to be accurate and reliable. However, API Technologies reserves the right to make changes without notice. © 2022 All rights reserved.