

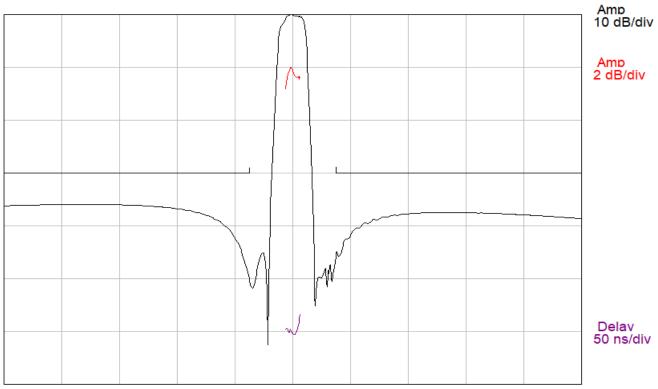
# SF0525HP03525S

525 MHz SAW Filter 10 MHz Bandwidth

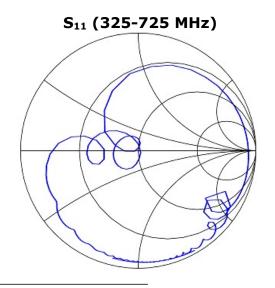
- 525 MHz Filter with 10 MHz Bandwidth
- 7 x 5 mm Ceramic LCC Package, 10 Pads
- RoHS compliant

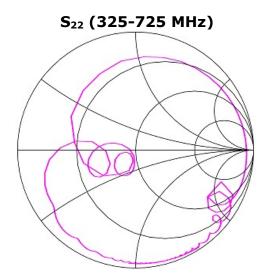
# SIMULATION

# **TYPICAL PERFORMANCE**



Center = 525 MHz, 40 MHz/div (500 kHz incr)





# **SPECIFICATION**

Parameter	Min	Type	Max	Units
Minimum Insertion Loss		2.0	3.2	dB
Device Delay		0.051		µsec
2 dB bandwidth <sup>1</sup>	10	15.29		MHz
Lower 2 dB Frequency <sup>1</sup>		517.49	520	MHz
Upper 2 dB frequency <sup>1</sup>	530	532.78		MHz
Center frequency (Fc, 3 dB) <sup>1</sup>		524.61		MHz
3 dB Bandwidth <sup>1</sup>	12	17.52		MHz
Lower 3 dB Frequency <sup>1</sup>		515.85	519	MHz
Upper 3 dB Frequency <sup>1</sup>	531	533.37		MHz
Lower 30 dB Frequency <sup>1</sup>	495	510.46		MHz
Upper 30 dB Frequency <sup>1</sup>		537.90	555	MHz
Amplitude Ripple (520-530 MHz)		0.82	2	dB p-p
Group Delay Ripple (220-230 MHz)		20		ns p-p
Rejection (25-195 MHz) <sup>1</sup>	30	36		dB
Rejection (255-425 MHz) <sup>1</sup>	30	38		dB
Input Return Loss (220-230 MHz) <sup>2</sup>	6	10.4		dB
Output Return Loss (220-230 MHz) <sup>2</sup>	6	10.0		dB
Material Temperature Coefficient	-40		ppm/°C	
Source and Load Impedance	50			ohms
Ambient Temperature	25			°C

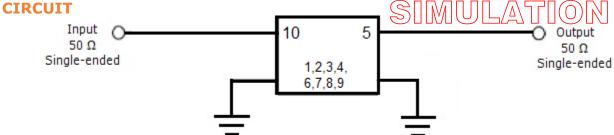
Notes:

- 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	+28	+34**	dBm

\*\* Requires Verification

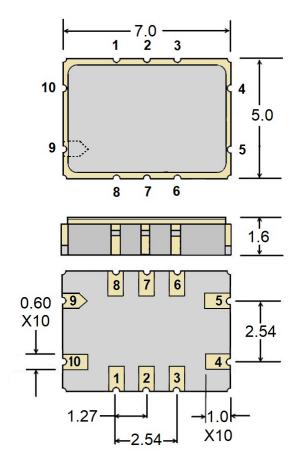


# Notes:

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

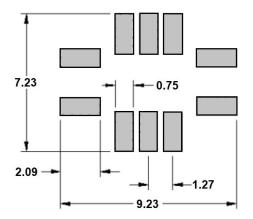


#### **PACKAGE OUTLINE**



# **MARKING**

#### SUGGESTED FOOTPRINT



Units: mm

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

## **Pad Configuration:**

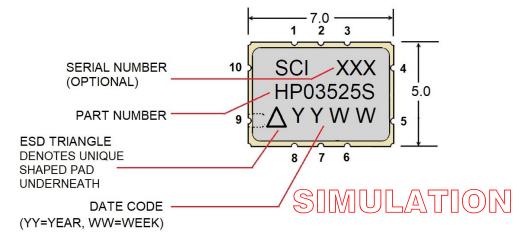
Input: 5 Output: 10

Ground: All other pads

#### **Package Material:**

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

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



ISO 9001 Registered

