SPECTRUM CONTROL

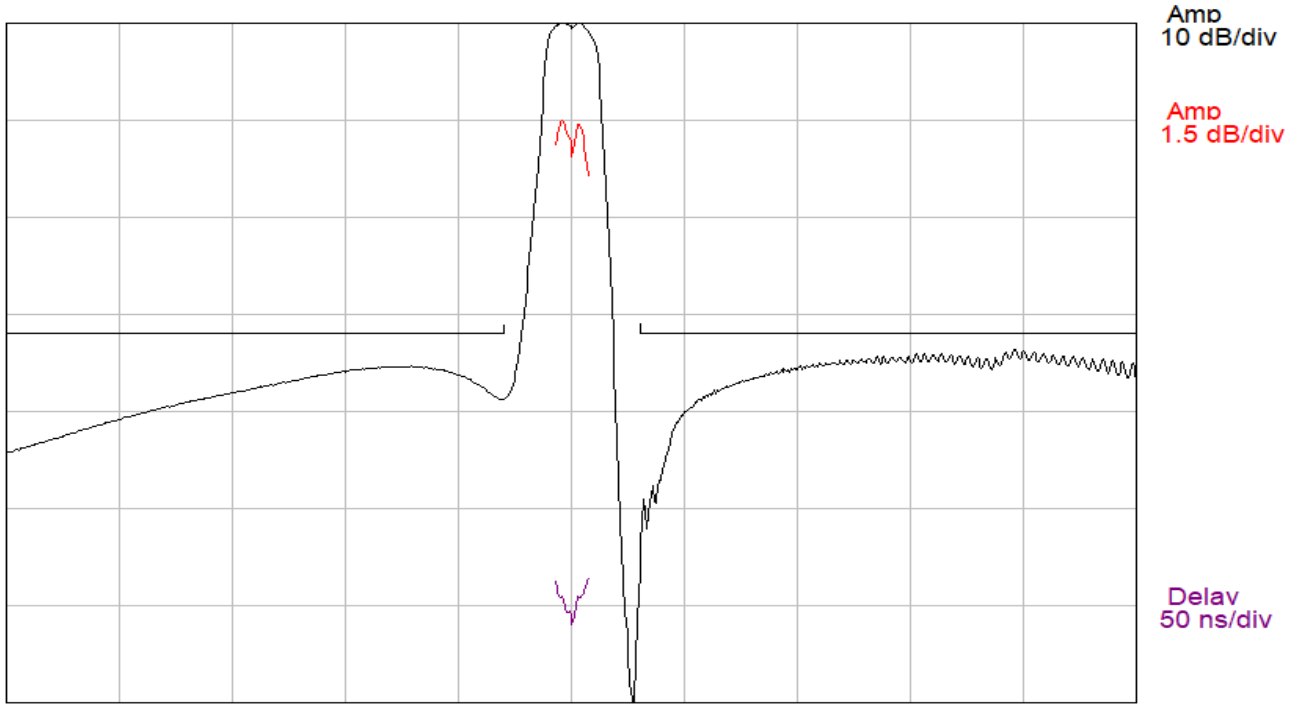
575 MHz SAW Filter
12 MHz Bandwidth
Part Number SF0575HP03515S

HIGH POWER SAW FILTER

DESCRIPTION

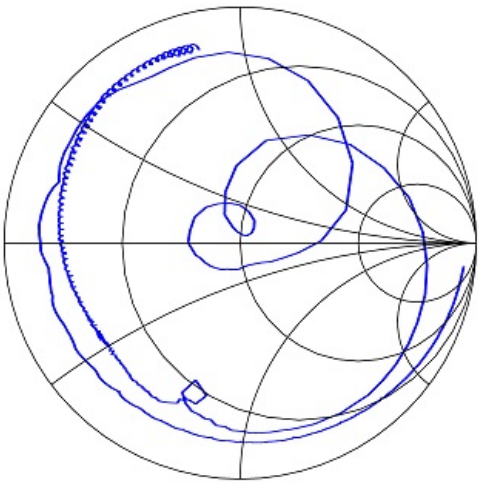
- 575 MHz High Power Filter with 12 MHz Bandwidth
- 7 x 5 mm Ceramic LCC Package, 10 Pads
- RoHS compliant.

TYPICAL PERFORMANCE

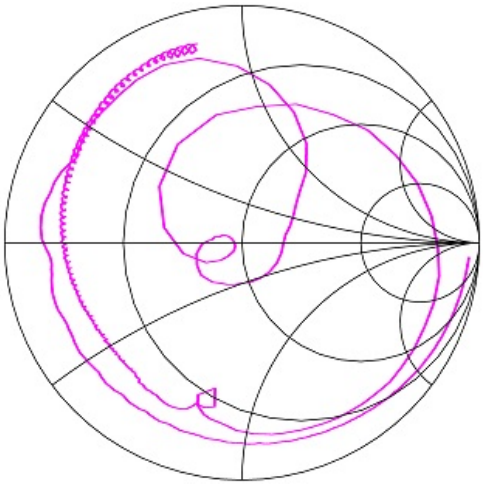


Center = 575 MHz, 40 MHz/div (500 kHz incr)

S_{11} (375-775 MHz)



S_{22} (375-775 MHz)



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SPECIFICATION

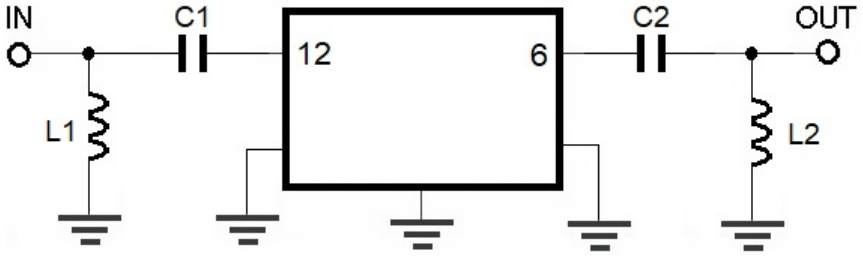
Parameter	Min	Typ	Max	Units
Minimum Insertion Loss	---	2.25	3	dB
Device Delay	---	0.0510	---	µsec
2 dB bandwidth[1]	12	16.430	---	MHz
Center frequency (Fc, 3 dB)[1]	---	574.917	---	MHz
3 dB Bandwidth[1]	14	17.658	---	MHz
Lower 35 dB Frequency[1]	551	555.852	---	MHz
Upper 35 dB Frequency[1]	---	589.864	599	MHz
Amplitude Ripple (569-581 MHz)	---	0.88	2	dB p-p
Group Delay Ripple (569-581 MHz)	---	25	---	ns p-p
Rejection (375-551 MHz)[1]	32	35.4	---	dB
Rejection (599-775 MHz)[1]	32	33.6	---	dB
Input Return Loss (569-581 MHz)[2]	8.1	13.1	---	dB
Output Return Loss (569-581 MHz)[2]	8.1	13.2	---	dB
Temperature Coefficient of Frequency		-40		ppm/˚C
Impedance		50		ohms
Ambient Temperature		25		˚C

Note: 1. Parameter value is referenced to the insertion loss value.
2. Measured in a 50Ω system with external matching; 8.1 dB=2.3:1 VSWR.
3. Maximum Suggested Steady-State Input Power Level.

MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	˚C
Operating Temperature Range	-40	85	˚C
Input Power Level [3]	--	+32	dBm

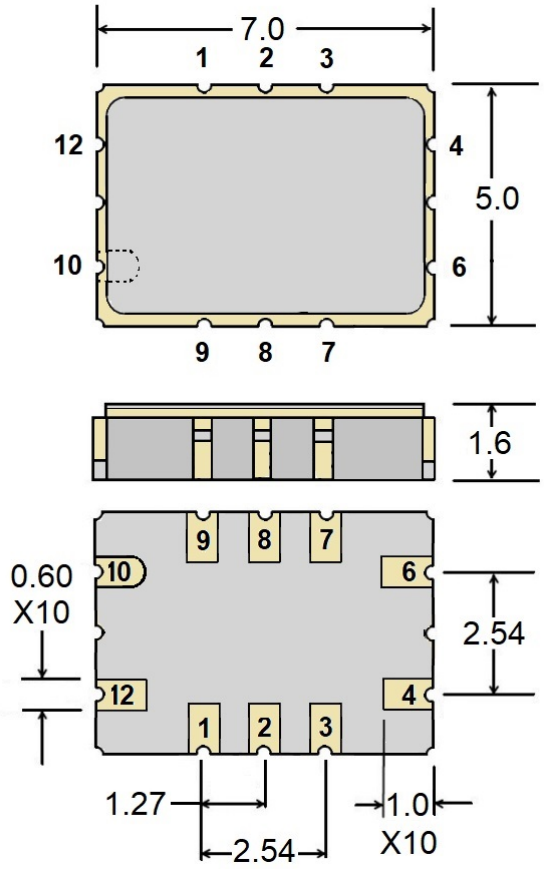
CIRCUIT



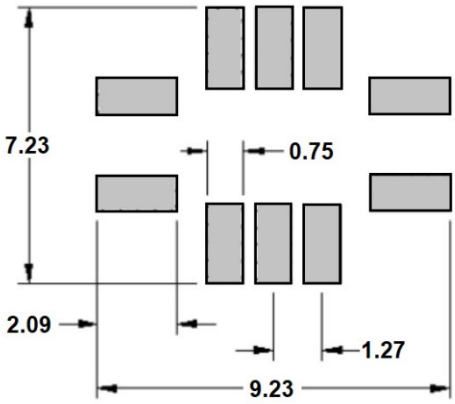
L1=15 nH, C1=10 pF, C2=10 pF, L2=15 nH

Notes:
1) Matching components for reference only. Typical inductor Q=40)
2) Recommended operation is in a 50 ohm system.

PACKAGE OUTLINE



SUGGESTED FOOTPRINT



Units: mm

Typical tolerances are ±0.15 mm except where indicated.

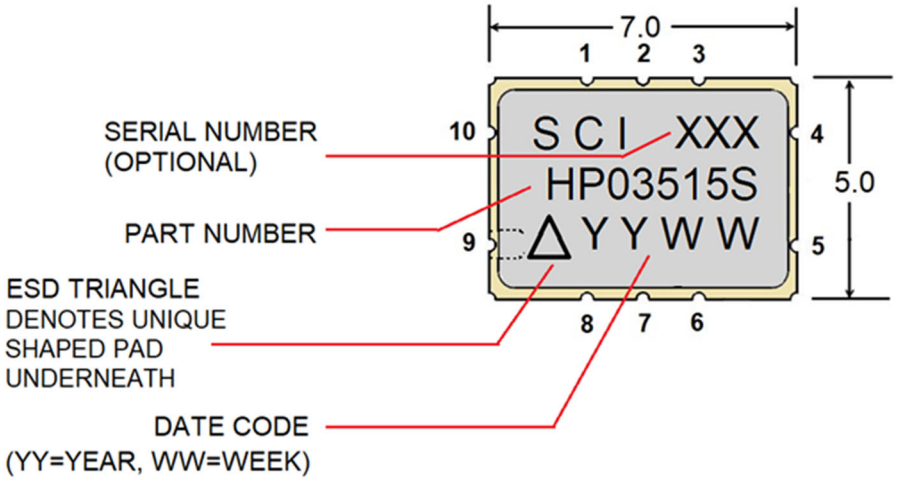
Pad Configuration:

Input:	12
Output:	6
Ground:	All other pads

Package Material:

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

MARKING



ISO 9001 Registered