

# SAW Filter

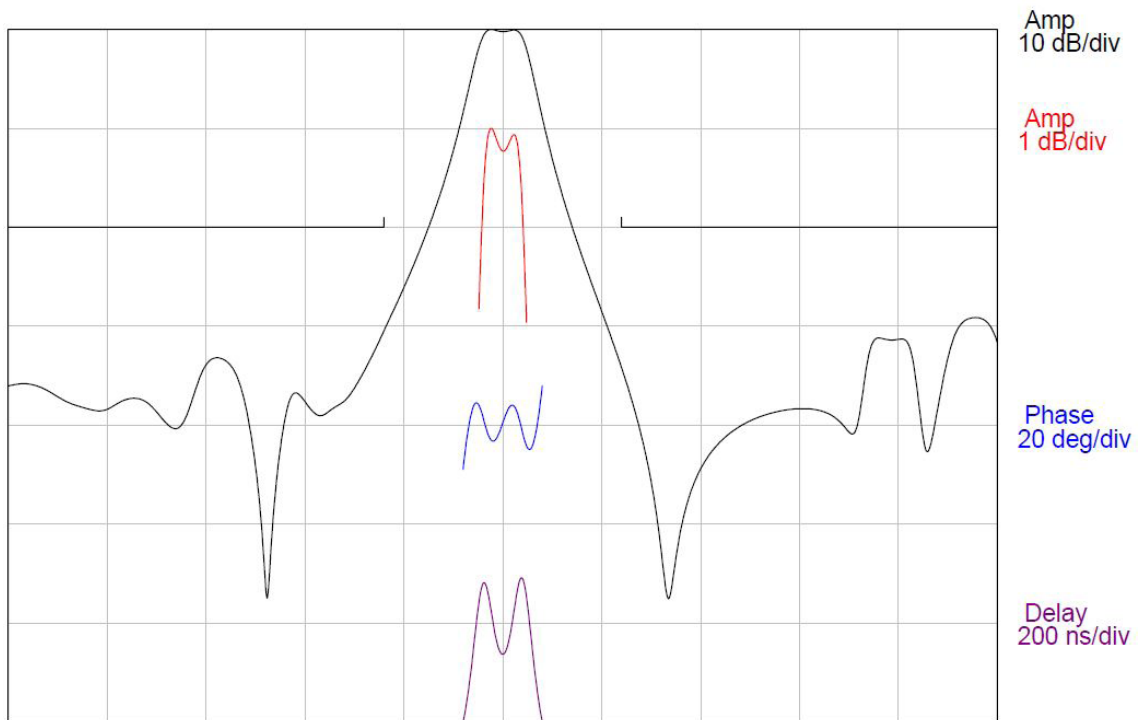
1600 MHz SAW Bandpass Filter, 0.5 MHz Bandwidth



- 3 x 3 mm Ceramic LCC, 6 Pads
- RoHS Compliant

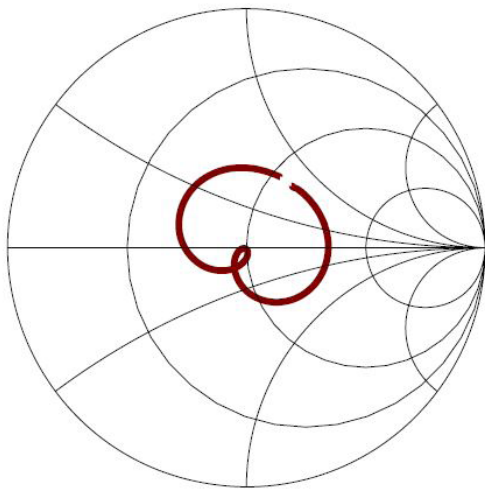
These filters are manufactured on quartz, which provides optimal temperature performance and are available from 80 -1600 MHz. This TCRF is designed for narrowband IF filtering such as in satellite transponders, directional finders and anti-jam modems. Other packaging styles are available for more rugged environments and applications. Standard part numbers as well as custom solutions are available. Please contact sales for more information.

## TYPICAL PERFORMANCE

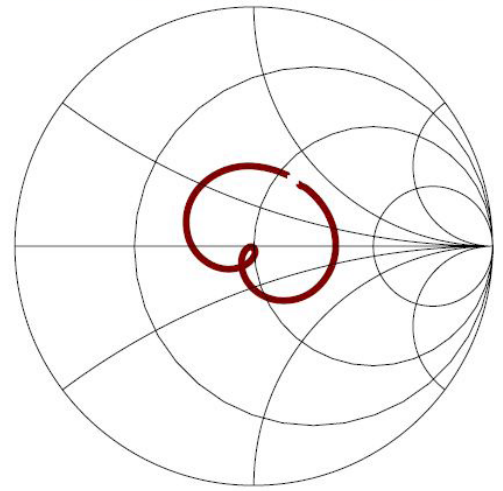


Center = 1600 MHz, 2.5 MHz/div (15.6 kHz incr)

## S11 (1595-1605 MHz)



## S22 (1595-1605 MHz)



### SPECIFICATION

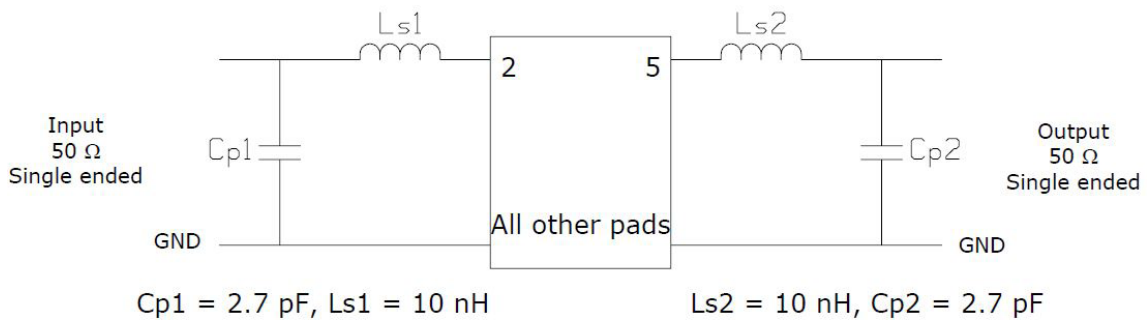
Parameter	Min	Typ	Max	Units
Nominal Center Frequency	-	1600	-	MHz
Minimum Insertion Loss	-	7.5	10	dB
Nominal Delay	-	0.4	-	µs
1 dB Bandwidth	0.8	1.0	-	MHz
Lower 1 dB Frequency	-	1599.48	1599.75	MHz
Upper 1 dB Frequency	1600.25	1600.52	-	MHz
3 dB Bandwidth	1.0	1.35	-	MHz
20 dB Bandwidth	-	3.6	-	MHz
Rejection (1000-1597 MHz)	20	30	-	dB
Rejection (1603-2000 MHz)	20	28	-	dB
Phase Deviation (1600 ± 0.25 MHz)	-	8	20	deg
Group Delay Ripple (166 ± 0.25 MHz)	-	75	200	ns
Source and Load Impedance	50			ohm

- Notes:
1. This specification applies across the whole operating temperature range (below). Allowance has been made for the movement of the response from sample to sample and with temperature change.
  2. All quoted dB levels other than the insertion loss are relative to the peak of the response.

### MAXIMUM RATINGS

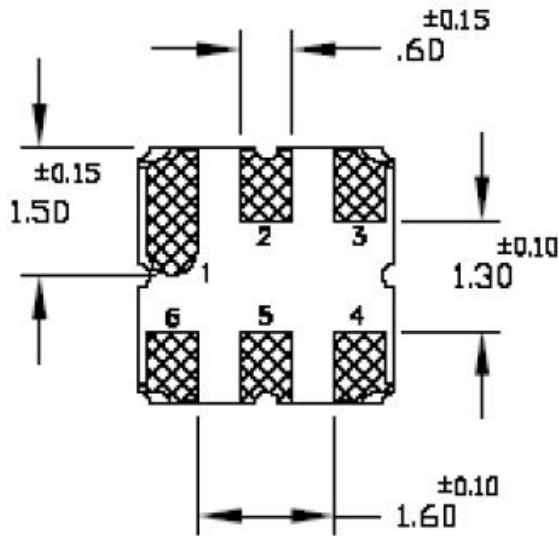
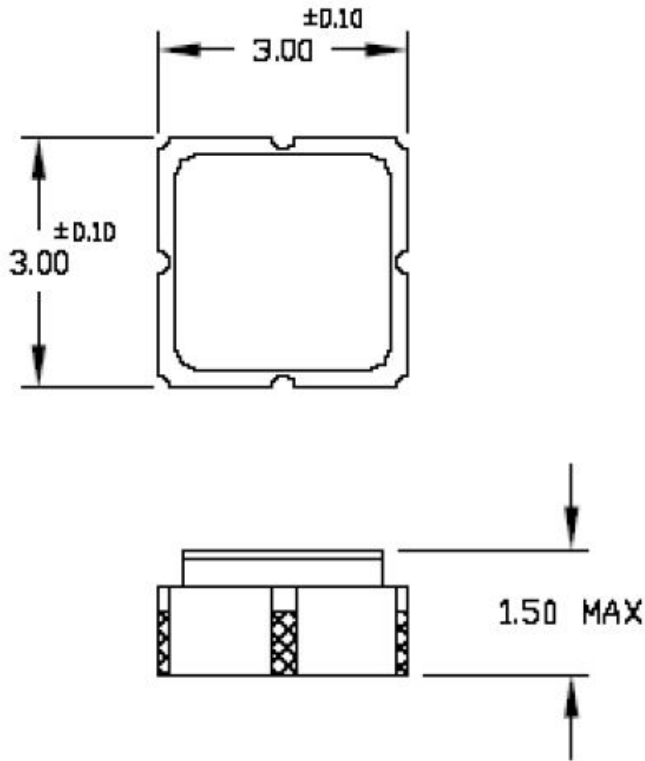
Parameter	Min	Max	Units
Storage Temperature Range	-40	85	°C
Operating Temperature Range	0	70	°C
Input Power Level	-	10	dBm

### MATCHING CIRCUIT

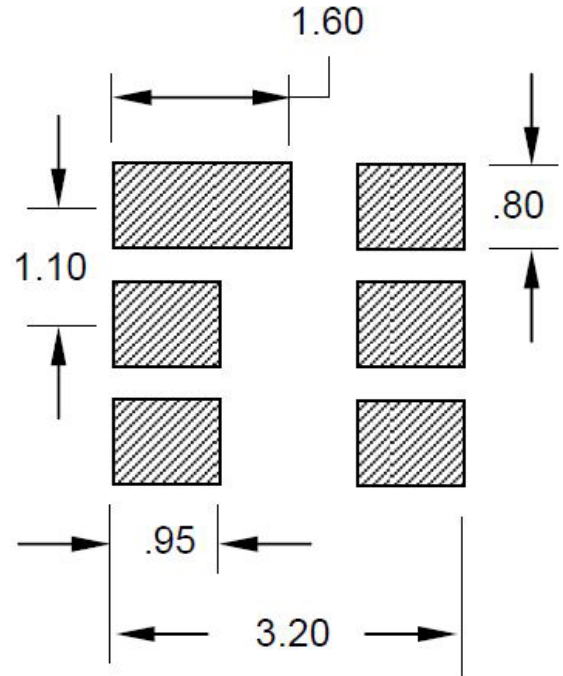


- Notes:
- Recommend ± 2% toleranced components. Typical inductor Q=40.
  - Values shown are for reference only. Actual values are dependent upon board layout.

**PACKAGE OUTLINE**



**SUGGESTED FOOTPRINT**



**Units:** mm

Tolerances are as shown.

**Pad Configuration:**

Input: 2  
 Output: 5  
 Ground: 1, 3, 4, 6

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