

SAW Filter

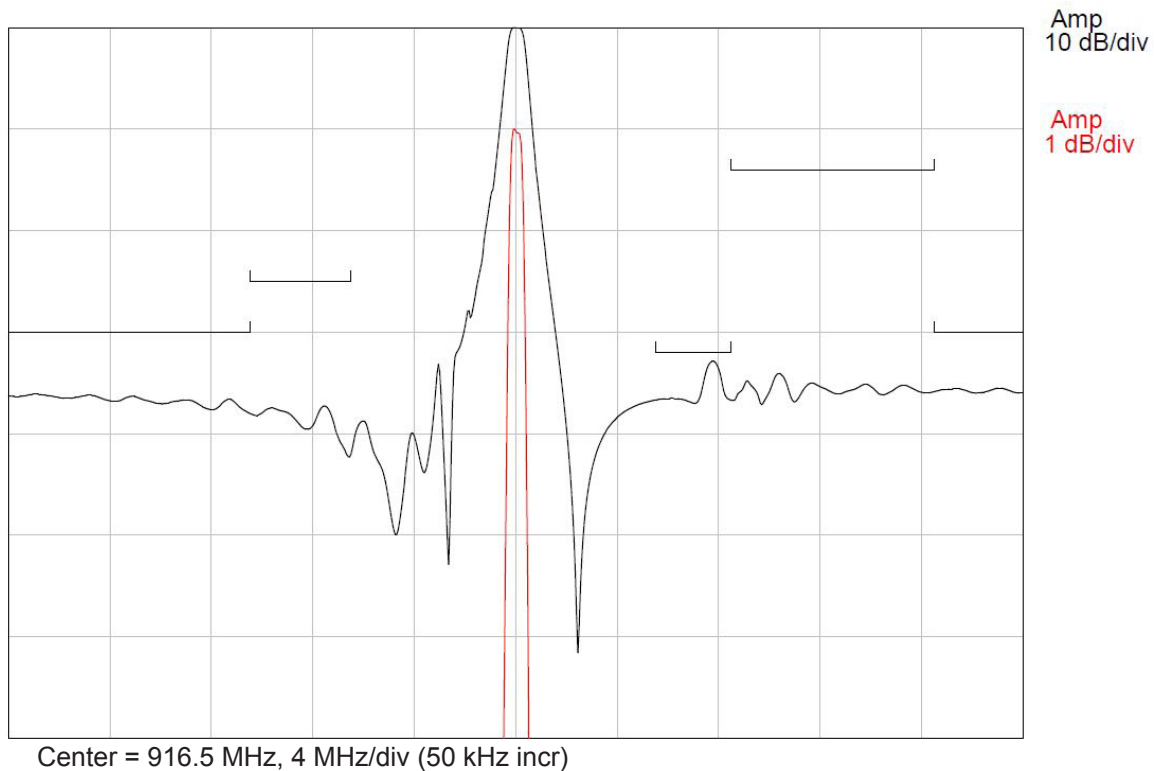
916.5 MHz SAW Bandpass Filter, 500 kHz Bandwidth



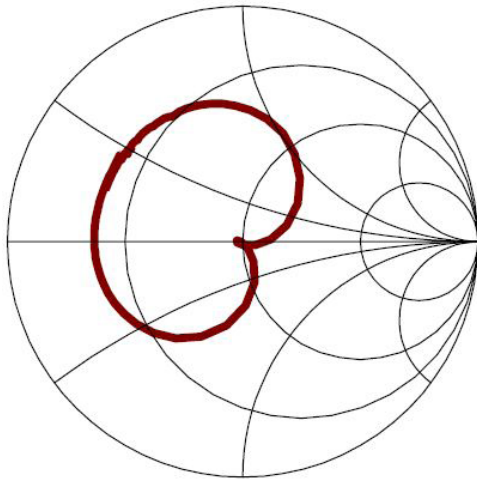
- 3.8 x 3.8 mm Ceramic LCC, 8 Pads
- RoHS Compliant

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.

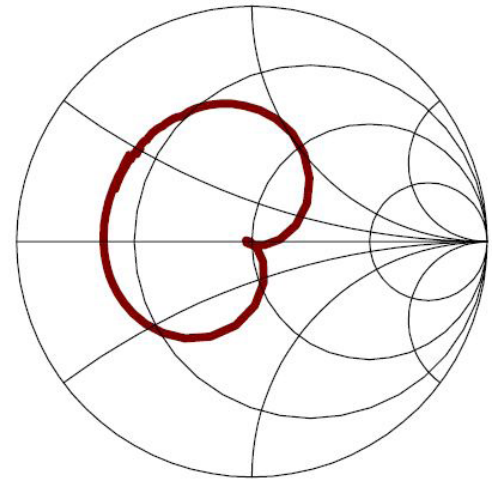
TYPICAL PERFORMANCE



S11 (896.5-936.5 MHz)



S22 (896.5-936.5 MHz)



SPECIFICATION

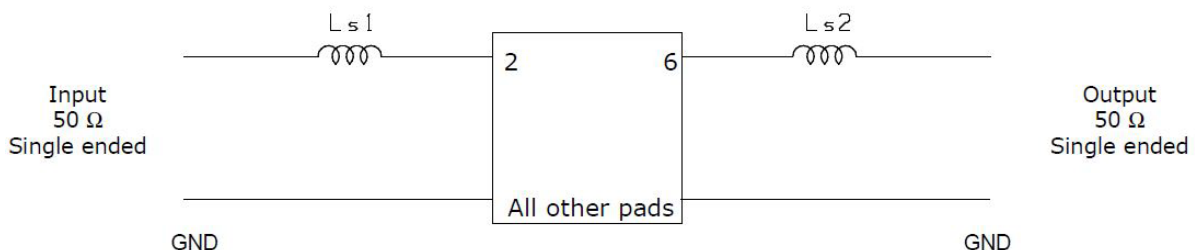
Parameter	Min	Typ	Max	Units
Center Frequency, (Fc) ¹	-	916.5	-	MHz
Minimum Insertion Loss	-	4.6	6	dB
Absolute Delay	-	0.62	-	us
Amplitude Ripple (916.25-916.75 MHz)	-	0.9	3	dB p-p
1 dB Bandwidth ²	-	560	-	kHz
3 dB Bandwidth ²	500	760	900	kHz
20 dB Bandwidth ²	-	2.25	-	MHz
Relative Attenuation (10-895 MHz) ²	30	35	-	dB
Relative Attenuation (895-906 MHz) ²	30	36	-	dB
Relative Attenuation (906-910 MHz) ²	25	37	-	dB
Relative Attenuation (922-925 MHz) ²	32	33.5	-	dB
Relative Attenuation (925-933 MHz) ²	14	34	-	dB
Relative Attenuation (933-940 MHz) ²	30	36	-	dB
Relative Attenuation (940-1100 Hz) ²	30	35	-	dB
Turnover Temperature	-	5	-	°C
Temperature Coefficient of Frequency	-0.032			ppm/°C ²
Source and Load Impedance	50			ohms
Ambient Temperature (Tref)	-	25	-	°C

- Notes:
1. Reference frequency. Computed as mean of the 3 dB frequencies.
 2. All dB values are referenced to the insertion loss value.
 3. Typical shift of frequency response with temperature is: $\Delta f = (T-T_{ref})^{2*}T_c * F_c$

MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	°C
Operating Temperature Range (T)	-40	85	°C
Input Power Level	-	13	dBm

MATCHING CIRCUIT

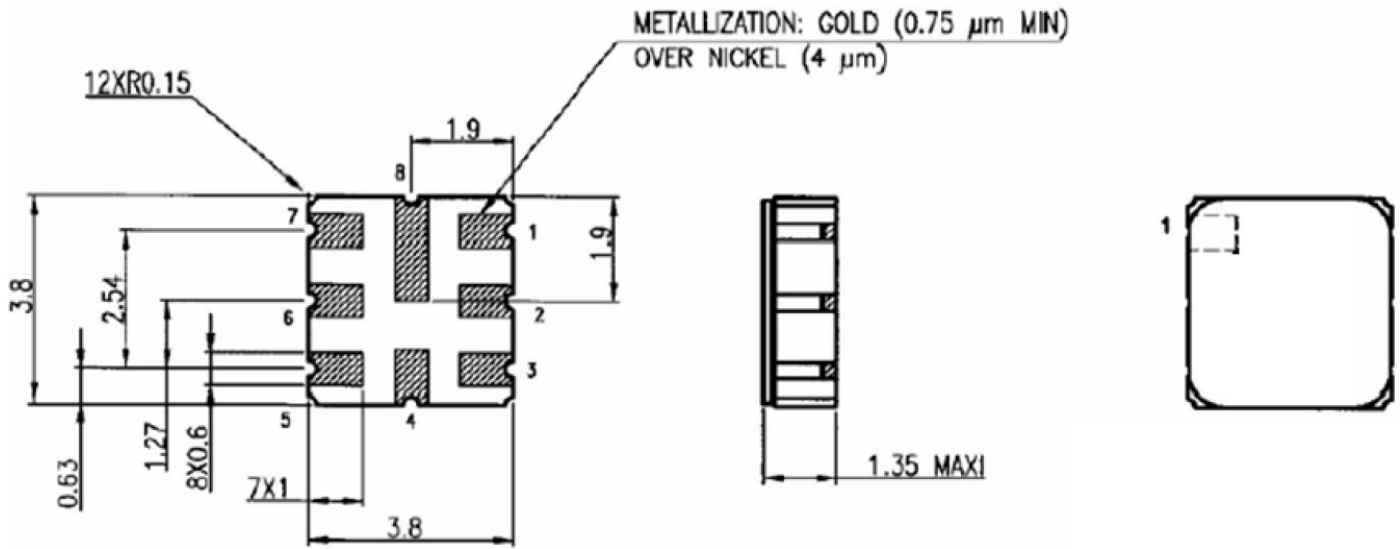


$$L_{s1} = 16 \text{ nH}, L_{s2} = 16 \text{ nH}$$

Notes:

- Recommend 2% or better tolerance matching components. Typical inductor Q=40.
- Values may change depending on board layout. Ones shown are intended as a guide only.

PACKAGE OUTLINE



Units: mm

Tolerances are ± 0.15 mm except where indicated.

Pad Configuration:

Input: 2
 Output: 6
 Ground: All other pads

Package Material:
 Body: Al_2O_3 ceramic
 Lid: Kovar, Ni plated
 Terminations: Au plating 1 μ m min, over a 1.3 - 8.9 μ m Ni plating

MARKING

