

SAW Filter

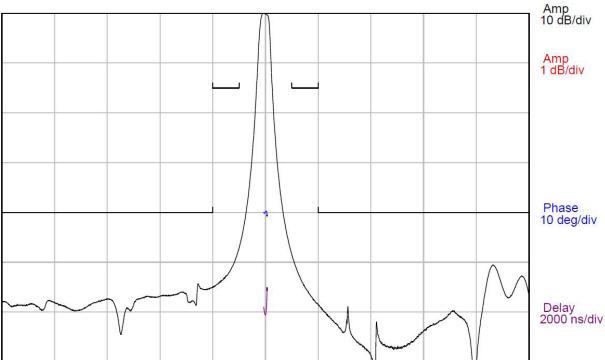
121.5 MHz SAW Bandpass Filter, 25 kHz Bandwidth



- 7 x 5 mm Ceramic LCC, 10 Pads
- RoHS Compliant

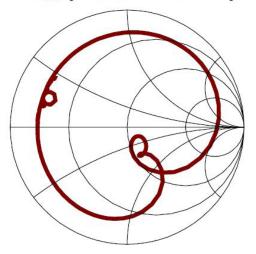
These filters are manufactured on quartz, which provides optimal temperature performance and are available from 80 -1600 MHz. This TCRF is designed for narrowband IF filtering such as in satellite transponders, directional finders and anti-jam modems. Other packaging styles are available for more rugged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

TYPICAL PERFORMANCE

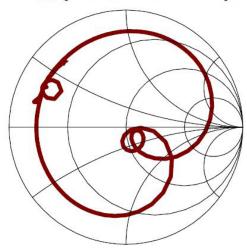


Center = 121.5 MHz, 0.4 MHz/div (2.5 kHz incr)

S₁₁ (119.5-123.5 MHz)



S₂₂ (119.5-123.5 MHz)



SPECIFICATION

| Parameter | Min | Тур | Max | Units |
|---|---------|---------|---------|--------|
| Center Frequency, (Fc) 1 | - | 121.5 | - | MHz |
| Minimum Insertion Loss | - | 2.8 | 3.5 | dB |
| 1 dB Bandwidth ² | 25 | 57 | - | kHz |
| Lower 1 dB Frequency | - | 121.468 | 121.487 | MHz |
| Upper 1 dB Frequency | 121.513 | 121.526 | - | MHz |
| Lower 15 dB Frequency ² | 121.3 | 121.44 | - | MHz |
| Upper 15 dB Frequency ² | - | 121.55 | 121.7 | MHz |
| Lower 40 dB Frequency ² | 121.1 | 121.35 | - | MHz |
| Upper 40 dB Frequency ² | - | 121.63 | 121.9 | MHz |
| Amplitude Ripple (Fc +/- 13 kHz) | - | 0.5 | 1 | dB p-p |
| Relative Attenuation (121.1 - 121.3 MHz) ² | 15 | 47 | - | dB |
| Relative Attenuation (121.7 - 121.9 MHz) ² | 15 | 48 | - | dB |
| Relative Attenuation (119.5 - 121.1 MHz) ² | 40 | 53 | - | dB |
| Relative Attenuation (121.9 - 123.5 MHz) ² | 40 | 50 | - | dB |
| Attenuation at Fc ± 1.5 MHz ² | 40 | 48 | - | dB |
| Attenuation at Fc ± 4.5 MHz ² | 40 | 48 | - | dB |
| Source and Load Impedance | 50 | | | ohms |
| Ambient Temperature | 25 | | | °C |

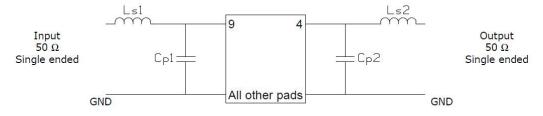
Notes:

- 1. Reference frequency. Computed as mean of the 3 dB frequencies.
- 2. All dB values are referenced to the insertion loss value.

MAXIMUM RATINGS

| Parameter | Min | Max | Units |
|-----------------------------|-----|-----|-------|
| Storage Temperature Range | -55 | 85 | °C |
| Operating Temperature Range | -55 | 85 | °C |
| Input Power Level | - | +25 | dBm |

MATCHING CIRCUIT



Cp1=2 pF, Ls1=330 nH, Cp2=2 pF, Ls2=330 nH

Notes:

- Recommend ± 2% toleranced components; typical inductor Q~20 to 40.
- Values shown are for reference only and may change depending on board layout.

