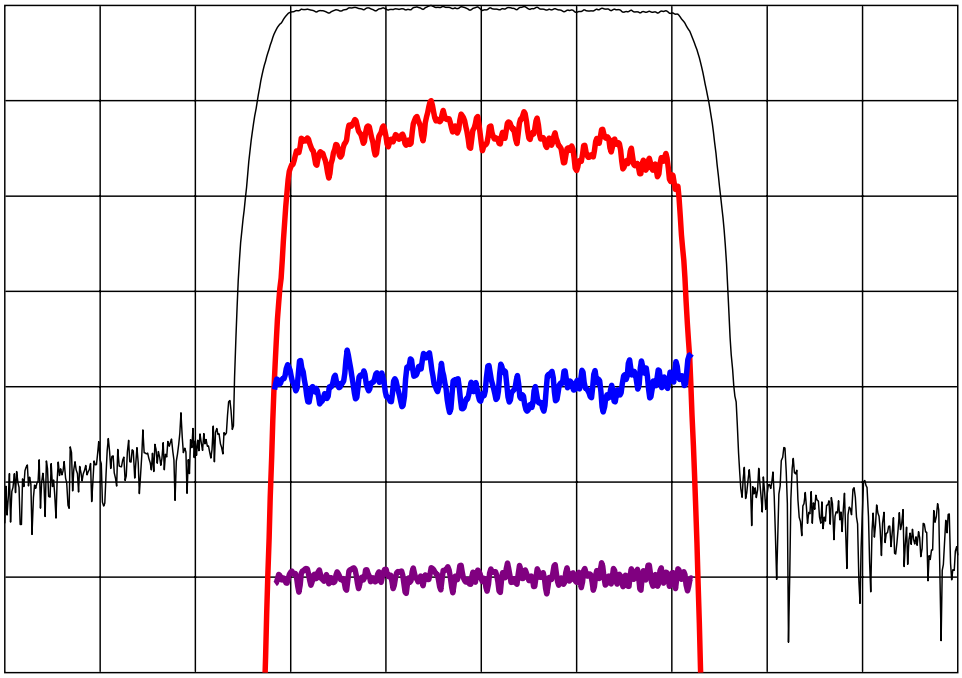
## DESCRIPTION

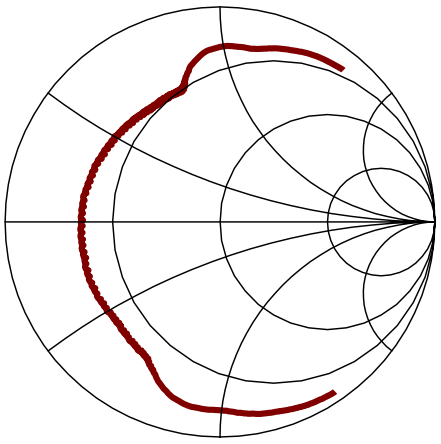
- 256 MHz SAW bandpass filter with 80 MHz bandwidth.
- 5 x 5 mm ceramic LCC package.
- RoHS compliant.

## TYPICAL PERFORMANCE

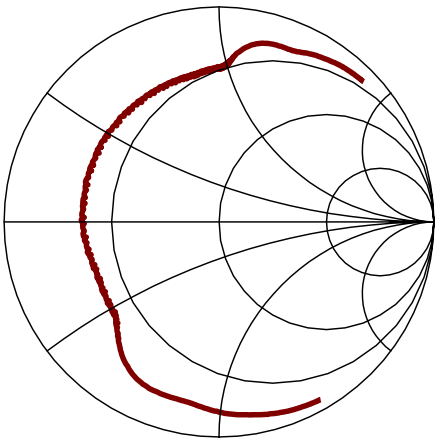


| | | | |
|---|---|---|---|
| Horizontal: | Frequency | 20 | MHz /div |
| Vertical (from top): | Magnitude | 10 | dB/div |
| | Magnitude | 1 | dB/div |
| | Phase Deviation | 5 | deg/div |
| | Group Delay Deviation | 50 | ns/div |

**S11 (156-356 MHz)**



**S22 (156-356 MHz)**



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## SPECIFICATION

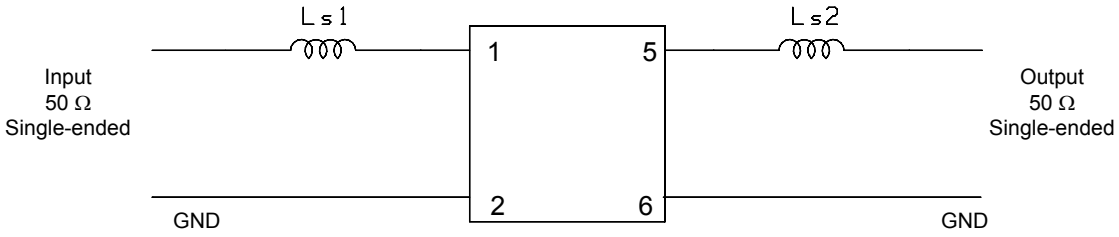
| Parameter [2] | Min | Typ | Max | Units |
|---|---|---|---|---|
| Center Frequency (Fc) [1] | - | 256 | - | MHz |
| Minimum Insertion Loss | - | 20.8 | 22 | dB |
| 1 dB Bandwidth | 80 | 84.5 | - | MHz |
| Lower 40 dB Band Edge | 196 | - | - | MHz |
| Upper 38 dB Band Edge | - | - | 316 | MHz |
| Rejection (0.3 to 30 MHz) | 30 | 40 | - | dB |
| Rejection (30 MHz to 196 MHz) | 40 | 45 | - | dB |
| Rejection (316 to 326 MHz) | 38 | 41 | - | dB |
| Rejection (326 to 500 MHz) | 40 | 45 | - | dB |
| Passband Ripple (216 to 296 MHz) [2] | - | 0.7 | 1.0 | dB p-p |
| Phase Linearity (216 to 296 MHz) [2] | - | 4.5 | 8 | deg p-p |
| Group Delay Deviation (216 to 296 MHz) [2] | - | 30 | 60 | ns p-p |
| Source and Load Impedance | - | 50 | - | Ω |
| Input Power | - | +10 | +13 | dBm |

Notes: 1. Average of the 3 dB band edge frequencies.
2. Specification applies to temperature range.

## MAXIMUM RATINGS

| Parameter | Min | Max | Units |
|---|---|---|---|
| Storage Temperature Range | -40 | 85 | ˚C |
| Operating Temperature Range | -10 | 85 | ˚C |
| Input Power Level | - | +13 | dBm |

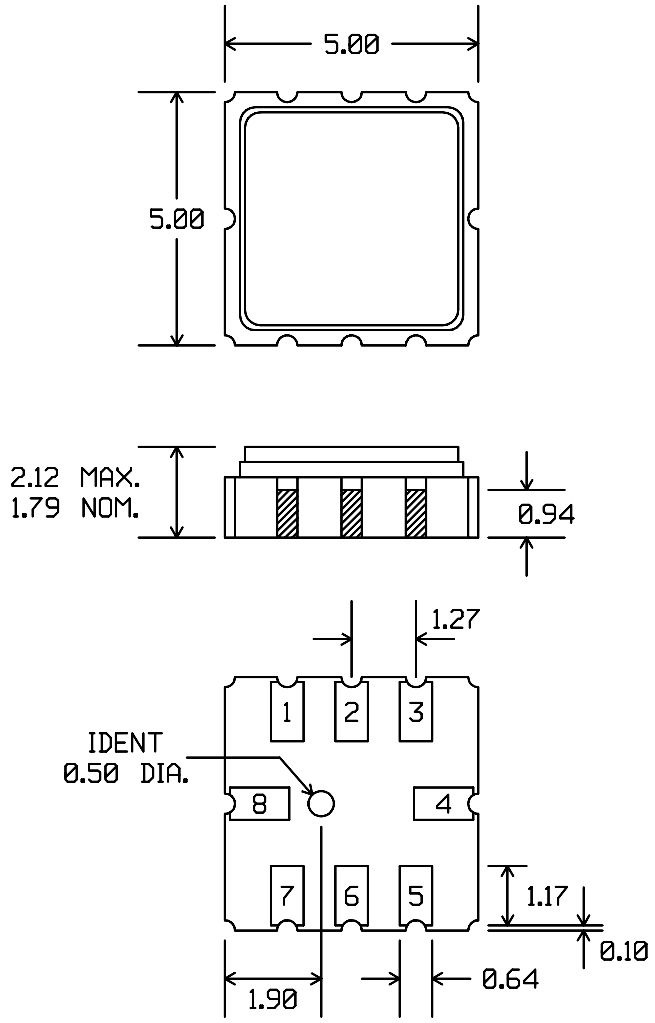
## MATCHING CIRCUIT




Typical component values: Ls1 = 66 nH Ls2 = 72 nH

Notes:
1. Recommend +/-2% tolerance matching components. Typical inductor Q=40.
2. Tuning values shown are for reference only. Optimum values may change depending upon board layout.

## PACKAGE OUTLINE




**Units:** mm

Tolerances are ±0.15 mm except where indicated.

**Pad Configuration:**

| | |
|---|---|
| Input: | 1 |
| Input Return: | 2 |
| Output: | 5 |
| Output Return: | 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

ISO 9001 Registered

All specifications are believed to be accurate and reliable. However, Spectrum Microwave reserves the right to make changes without notice.
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