

Low Pass Filter

SXLP-4.7+

50Ω DC to 4.7 MHz

Maximum Ratings

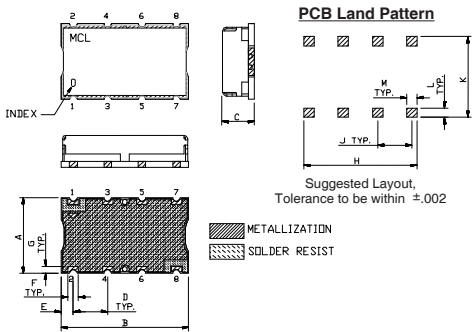
| | |
|-----------------------|----------------|
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input | 0.5W Max. |

Permanent damage may occur if any of these limits are exceeded.

Pin Connections

| | |
|--------|------------------|
| INPUT | 1 |
| OUTPUT | 8 |
| GROUND | 2, 3, 4, 5, 6, 7 |

Outline Drawing

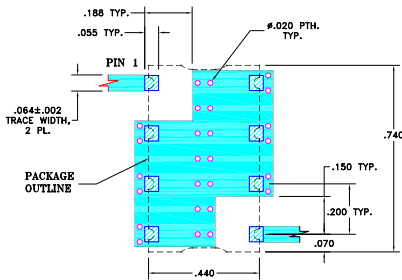


Outline Dimensions (inch/mm)

| A | B | C | D | E | F | G | H | J | K | L | M | wt. |
|-----|-----|-----|------|-----|------|-------|-------|------|-------|------|------|-----|
| .44 | .74 | .27 | .200 | .07 | .060 | 11.18 | 18.80 | 6.86 | 5.08 | 1.78 | 1.52 | |
| | | | | | | 1.02 | 16.76 | 5.08 | 11.94 | 1.40 | 1.52 | 3.0 |

Note: Please refer to case style drawing for details

Demo Board MCL P/N: TB-368 Suggested PCB Layout (PL-230)

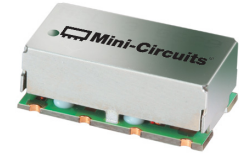


Features

- high rejection
- sharp cut-off
- shielded package
- aqueous washable
- low cost

Applications

- defense communications
- receivers / transmitters
- harmonic rejection



Generic photo used for illustration purposes only
CASE STYLE: HF1139

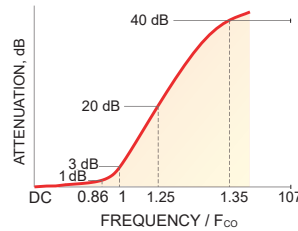
+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

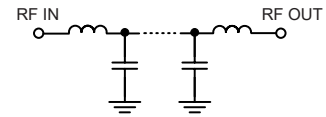
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

| PASSBAND (MHz) | f _{co} , MHz Nom. | STOPBAND (MHz) | | VSWR (:1) | |
|----------------|----------------------------|----------------|---------------|---------------|---------------|
| | | (Loss > 20dB) | (Loss > 40dB) | Passband Typ. | Stopband Typ. |
| DC - 4.7 | 5.6 | 6.6 - 7.4 | 7.4 - 600 | 1.25 | 18 |

Typical Frequency Response

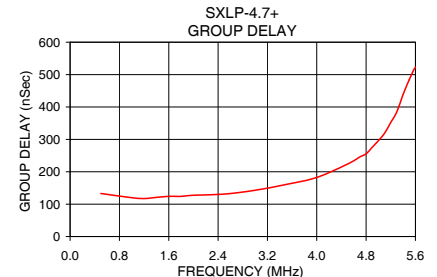
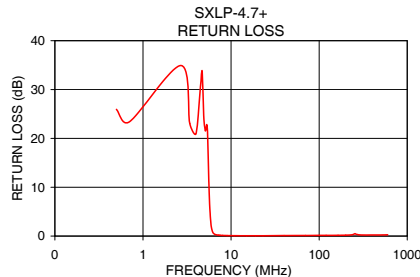
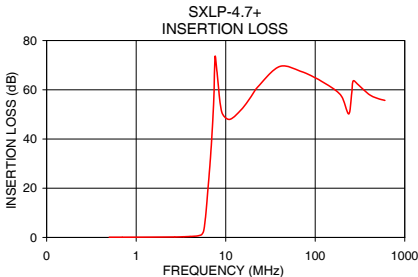


Functional Schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | | Return Loss (dB) | Frequency (MHz) | Group Delay (nSec) |
|-----------------|---------------------|----------|------------------|-----------------|--------------------|
| | \bar{x} | σ | | | |
| 0.5 | 0.08 | 0.01 | 25.94 | 0.5 | 132.84 |
| 2.7 | 0.20 | 0.01 | 34.92 | 1.2 | 117.19 |
| 2.7 | 0.20 | 0.01 | 34.92 | 1.4 | 120.85 |
| 4.5 | 0.49 | 0.02 | 30.78 | 1.6 | 124.16 |
| 4.7 | 0.56 | 0.02 | 33.74 | 1.8 | 124.15 |
| 5.3 | 1.02 | 0.04 | 22.84 | 2.0 | 127.50 |
| 5.6 | 2.09 | 0.32 | 10.91 | 2.5 | 131.07 |
| 5.8 | 4.70 | 0.75 | 4.32 | 3.0 | 142.83 |
| 6.0 | 9.43 | 1.03 | 1.65 | 3.5 | 160.70 |
| 6.2 | 15.17 | 1.09 | 0.78 | 4.0 | 182.44 |
| 6.6 | 27.16 | 1.10 | 0.33 | 4.5 | 223.68 |
| 7.4 | 57.30 | 1.96 | 0.16 | 4.7 | 245.95 |
| 15.0 | 52.02 | 0.24 | 0.07 | 4.8 | 255.31 |
| 23.0 | 61.33 | 0.16 | 0.07 | 5.0 | 295.98 |
| 40.0 | 69.54 | 0.59 | 0.10 | 5.2 | 352.27 |
| 100.0 | 65.17 | 0.41 | 0.14 | 5.3 | 385.52 |
| 200.0 | 57.06 | 0.25 | 0.18 | 5.4 | 438.20 |
| 400.0 | 58.40 | 0.26 | 0.22 | 5.5 | 484.24 |
| 600.0 | 55.96 | 0.30 | 0.27 | 5.6 | 521.62 |



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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