

Low Pass Filter

SXLP-190+

50Ω DC to 190 MHz

Maximum Ratings

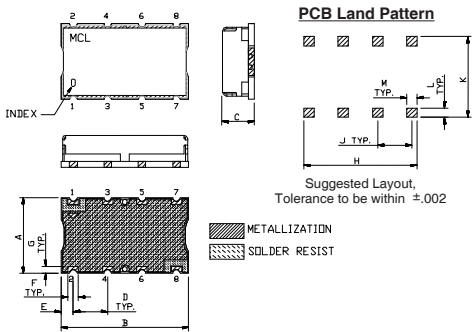
| | |
|-----------------------|----------------|
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input | 0.5W Max. |

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

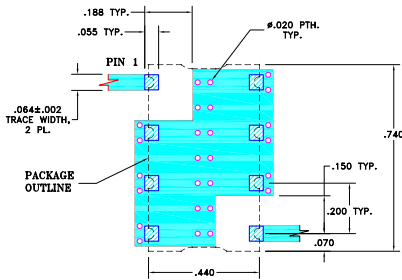


Outline Dimensions (inch/mm)

| A | B | C | D | E | F | |
|-------|-------|------|-------|------|------|-------|
| .44 | .74 | .27 | .200 | .07 | .060 | |
| 11.18 | 18.80 | 6.86 | 5.08 | 1.78 | 1.52 | |
| G | H | J | K | L | M | wt. |
| .040 | .660 | .200 | .470 | .055 | .060 | grams |
| 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)

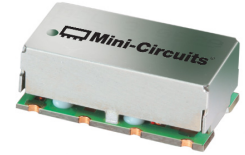


Features

- 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

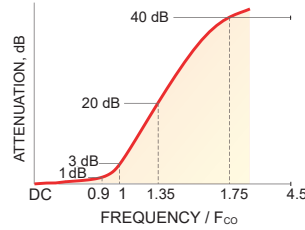
+RoHS Compliant

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

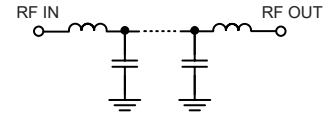
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

| PASSBAND (MHz) | f _{co} , MHz Nom. | STOPBAND (MHz) | | VSWR (:1) | |
|----------------|----------------------------|----------------|---------------|---------------|---------------|
| | | (Loss > 20dB) | (Loss > 40dB) | Passband Typ. | Stopband Typ. |
| DC - 190 | 210 | 290 - 390 | 390 - 1000 | 1.4 | 18 |

Typical Frequency Response

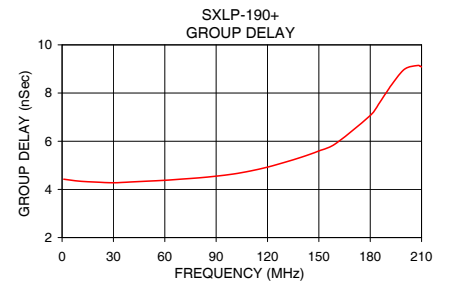
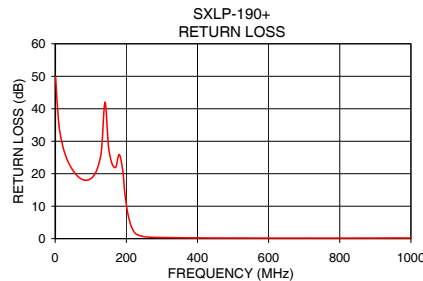
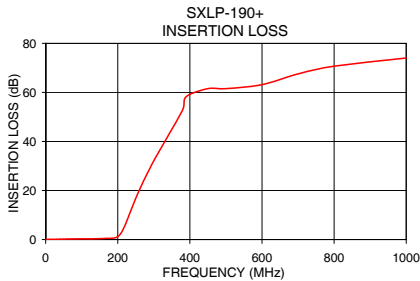


Functional Schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | | Return Loss (dB) | Frequency (MHz) | Group Delay (nSec) |
|-----------------|---------------------|----------|------------------|-----------------|--------------------|
| | \bar{x} | σ | | | |
| 1.0 | 0.04 | 0.01 | 49.88 | 1.0 | 4.42 |
| 20.0 | 0.08 | 0.01 | 29.15 | 10.0 | 4.34 |
| 50.0 | 0.17 | 0.01 | 21.01 | 20.0 | 4.30 |
| 120.0 | 0.29 | 0.01 | 22.07 | 30.0 | 4.28 |
| 140.0 | 0.33 | 0.00 | 42.01 | 50.0 | 4.34 |
| 190.0 | 0.63 | 0.01 | 20.93 | 60.0 | 4.38 |
| 200.0 | 1.17 | 0.03 | 10.55 | 80.0 | 4.48 |
| 210.0 | 2.79 | 0.09 | 5.05 | 90.0 | 4.55 |
| 220.0 | 5.74 | 0.15 | 2.39 | 100.0 | 4.64 |
| 230.0 | 9.45 | 0.22 | 1.28 | 110.0 | 4.76 |
| 250.0 | 16.95 | 0.26 | 0.61 | 120.0 | 4.92 |
| 290.0 | 29.35 | 0.34 | 0.38 | 130.0 | 5.12 |
| 390.0 | 55.75 | 2.14 | 0.23 | 140.0 | 5.34 |
| 500.0 | 65.57 | 4.10 | 0.19 | 150.0 | 5.60 |
| 600.0 | 68.15 | 5.42 | 0.18 | 160.0 | 5.91 |
| 700.0 | 75.50 | 5.06 | 0.17 | 180.0 | 7.07 |
| 800.0 | 71.08 | 3.29 | 0.18 | 190.0 | 8.08 |
| 1000.0 | 74.05 | 3.49 | 0.22 | 210.0 | 9.09 |



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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

