

Low Pass Filter

SXLP-10+

50Ω DC to 10 MHz

Maximum Ratings

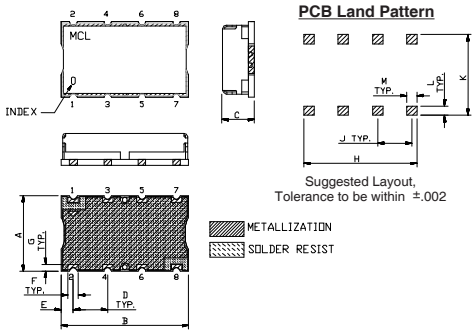
| | |
|-----------------------|----------------|
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input | 0.5W Max. |

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

Pin Connections

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

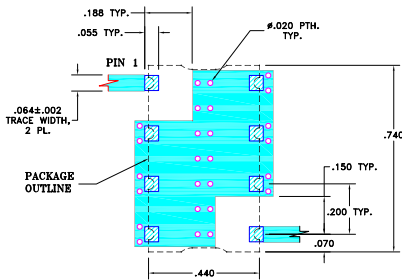
Outline Drawing



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. grams |
| .040 | .660 | .200 | .470 | .055 | .060 | 3.0 |
| 1.02 | 16.76 | 5.08 | 11.94 | 1.40 | 1.52 | |

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

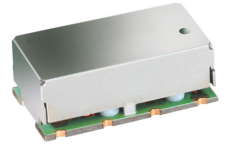


Features

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

Applications

- defense communications
- receivers / transmitters
- harmonic rejection



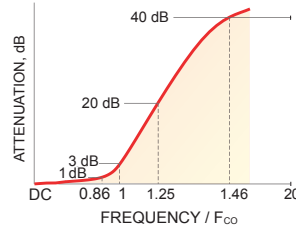
CASE STYLE: HF1139

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

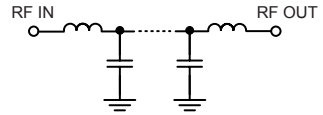
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

| PASSBAND (MHz) | f _{co} , MHz Nom. | STOPBAND (MHz) | | VSWR (:1) | |
|----------------|----------------------------|----------------|---------------|---------------|---------------|
| | | (Loss > 20dB) | (Loss > 40dB) | Passband Typ. | Stopband Typ. |
| DC - 10 | 11.2 | 14 - 16 | 16 - 230 | 1.2 | 18 |

Typical Frequency Response

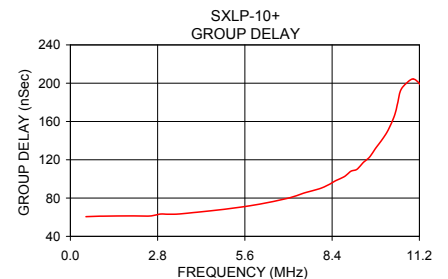
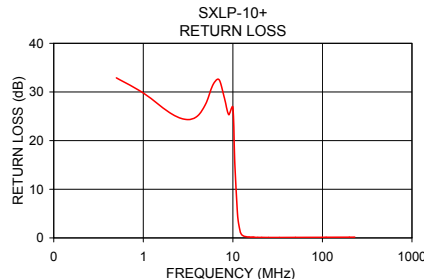
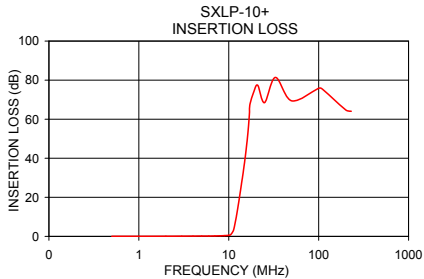


Functional Schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | | Return Loss (dB) | Frequency (MHz) | Group Delay (nSec) |
|-----------------|---------------------|----------|------------------|-----------------|--------------------|
| | \bar{x} | σ | | | |
| 0.5 | 0.03 | 0.00 | 32.90 | 0.5 | 60.52 |
| 2.0 | 0.07 | 0.00 | 25.67 | 2.5 | 61.12 |
| 5.0 | 0.15 | 0.01 | 27.63 | 2.7 | 62.00 |
| 8.0 | 0.29 | 0.01 | 28.96 | 2.9 | 63.30 |
| 10.0 | 0.58 | 0.02 | 26.84 | 3.1 | 63.10 |
| 10.5 | 0.95 | 0.07 | 15.52 | 3.3 | 63.12 |
| 11.0 | 2.14 | 0.19 | 7.72 | 3.5 | 63.40 |
| 11.2 | 3.05 | 0.26 | 5.59 | 4.0 | 65.03 |
| 11.7 | 6.53 | 0.44 | 2.34 | 5.0 | 68.54 |
| 12.4 | 13.07 | 0.57 | 0.81 | 6.0 | 73.24 |
| 14.0 | 28.71 | 0.68 | 0.26 | 7.5 | 85.27 |
| 16.0 | 49.92 | 1.04 | 0.15 | 8.0 | 89.81 |
| 20.0 | 77.84 | 4.07 | 0.10 | 8.3 | 94.14 |
| 30.0 | 74.45 | 1.46 | 0.09 | 8.5 | 97.89 |
| 100.0 | 75.56 | 2.51 | 0.12 | 9.0 | 107.94 |
| 120.0 | 72.40 | 2.09 | 0.13 | 9.6 | 122.71 |
| 140.0 | 69.23 | 1.51 | 0.13 | 10.0 | 140.89 |
| 160.0 | 66.85 | 1.18 | 0.14 | 10.5 | 172.46 |
| 200.0 | 64.18 | 0.83 | 0.15 | 11.0 | 200.44 |
| 230.0 | 63.37 | 0.87 | 0.16 | 11.2 | 204.40 |



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



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Mini-Circuits:](#)

[SXLP-10+](#)