

Low Pass Filter

SXLP-21.4+

50Ω DC to 22 MHz

Maximum Ratings

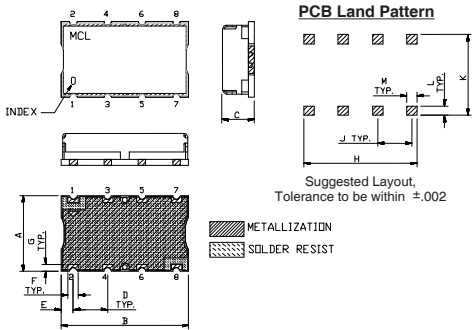
| | |
|-----------------------|----------------|
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input | 0.5W Max. |

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

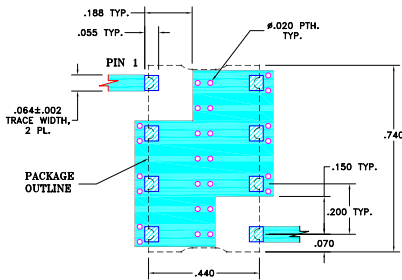


Outline Dimensions (inch/mm)

| 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. |
| 1.02 | .660 | .200 | .470 | .055 | .060 | grams |
| 26.17 | 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)

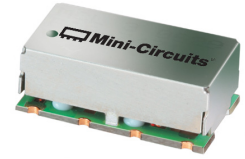


Features

- 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

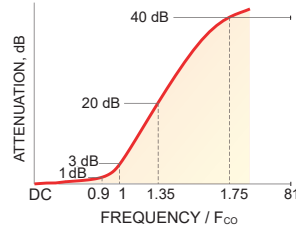
+RoHS Compliant

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

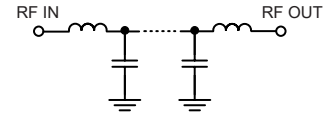
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

| PASSBAND (MHz) | f _{co} , MHz Nom. | STOPBAND (MHz) | | VSWR (:1) | |
|----------------|----------------------------|----------------|---------------|---------------|---------------|
| | | (Loss > 20dB) | (Loss > 40dB) | Passband Typ. | Stopband Typ. |
| DC - 22 | 24.5 | 32 - 41 | 41 - 2000 | 1.3 | 18 |

Typical Frequency Response

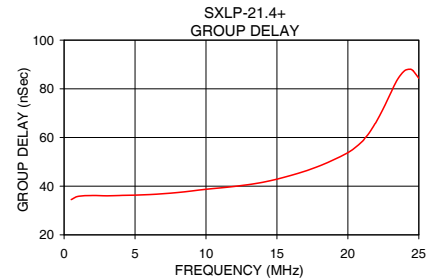
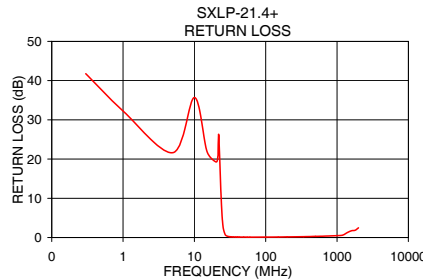
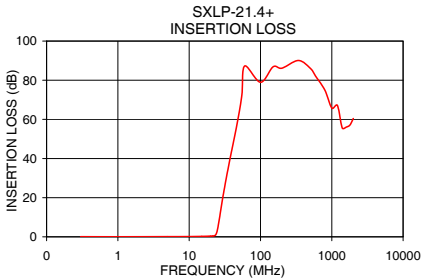


Functional Schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | | Return Loss (dB) | Frequency (MHz) | Group Delay (nSec) |
|-----------------|---------------------|----------|------------------|-----------------|--------------------|
| | \bar{x} | σ | | | |
| 0.5 | 0.04 | 0.01 | 39.37 | 0.5 | 34.48 |
| 2.5 | 0.08 | 0.01 | 24.51 | 2.0 | 36.18 |
| 11.0 | 0.16 | 0.01 | 27.34 | 4.0 | 36.18 |
| 19.0 | 0.33 | 0.01 | 22.33 | 6.0 | 36.53 |
| 22.0 | 0.47 | 0.01 | 26.05 | 8.0 | 37.40 |
| 23.5 | 0.95 | 0.04 | 11.82 | 10.0 | 38.72 |
| 24.0 | 1.53 | 0.09 | 7.93 | 12.0 | 39.90 |
| 24.5 | 2.46 | 0.14 | 5.23 | 14.0 | 41.60 |
| 25.5 | 5.35 | 0.26 | 2.24 | 16.0 | 44.45 |
| 27.5 | 12.69 | 0.38 | 0.58 | 18.0 | 48.34 |
| 32.0 | 26.80 | 0.44 | 0.20 | 20.0 | 53.79 |
| 41.0 | 46.58 | 0.58 | 0.12 | 21.0 | 58.29 |
| 70.0 | 85.52 | 4.91 | 0.10 | 21.4 | 61.06 |
| 100.0 | 83.48 | 4.91 | 0.11 | 21.8 | 64.61 |
| 300.0 | 93.44 | 3.07 | 0.20 | 22.0 | 66.39 |
| 500.0 | 88.28 | 4.20 | 0.29 | 23.0 | 78.07 |
| 1000.0 | 66.04 | 2.86 | 0.48 | 23.5 | 83.86 |
| 1500.0 | 55.48 | 1.81 | 1.92 | 24.0 | 87.44 |
| 2000.0 | 58.00 | 3.29 | 2.47 | 25.0 | 84.33 |



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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