

Surface Mount Bandpass Filter

SXBP-820+

50Ω 769 to 872 MHz

Maximum Ratings

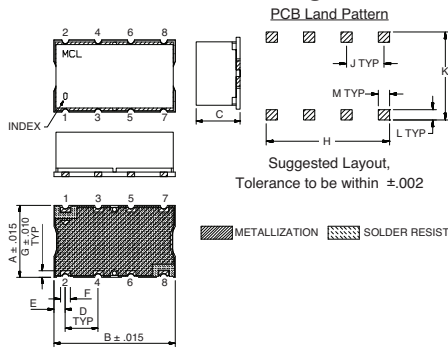
| | |
|-----------------------|----------------|
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input | 0.5W Max. |

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

Pin Connections

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

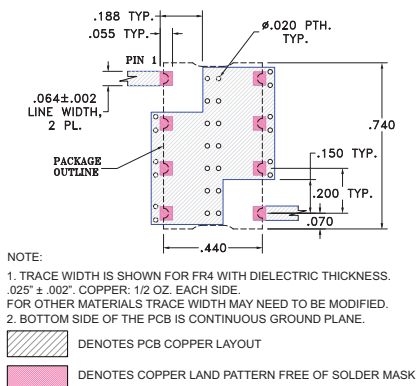
Outline Drawing



Outline Dimensions (inch/mm)

| Dimension | Value (inch) | Value (mm) |
|-----------|--------------|------------|
| A | .440 | 11.18 |
| B | .740 | 18.80 |
| C | .27 | 6.86 |
| D | .200 | 5.08 |
| E | .07 | 1.78 |
| F | .060 | 1.52 |
| G | .040 | 1.02 |
| H | .660 | 16.76 |
| J | .200 | 5.08 |
| K | .470 | 11.94 |
| L | .055 | 1.40 |
| M | .060 | 1.52 |
| wt. | | grams |
| | | 3.0 |

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

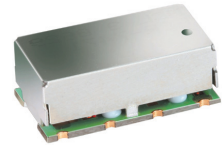


Features

- High Rejection
- Flat Group Delay
- Shielded case
- Aqueous washable

Applications

- Mobile TV
- Receivers / Transmitters
- Harmonic rejection



CASE STYLE: HF1139
PRICE: \$17.95 ea. QTY (1-9)

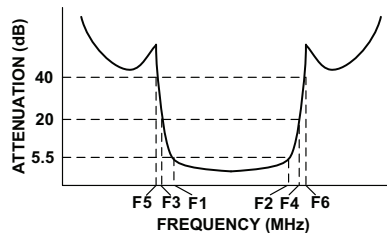
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

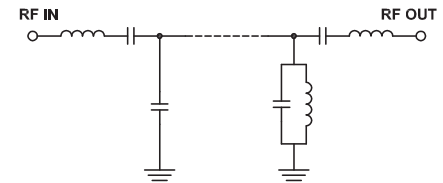
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

| CENTER FREQ. (MHz) | PASSBAND (MHz) (Loss < 5.5dB) | STOPBANDS (MHz) | | | | VSWR (:1) | | |
|--------------------|---------------------------------|-----------------|----------------|----------------|----------------|-----------|------|------|
| | | Loss > 20dB | Loss > 40dB | Passband | Stopband | Typ. | Max. | Typ. |
| F _c | F ₁ - F ₂ | F ₃ | F ₄ | F ₅ | F ₆ | | | |
| 820 | 769 - 872 | 550 | 920 | 450 | 1000 - 2600 | 1.7 | 2.3 | 20 |

Typical Frequency Response

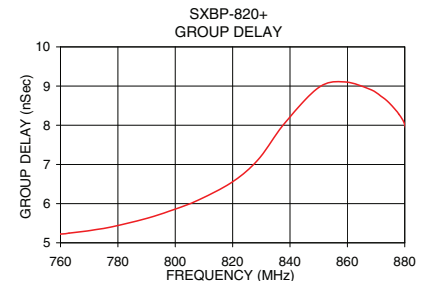
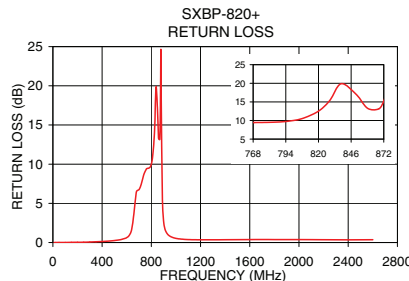
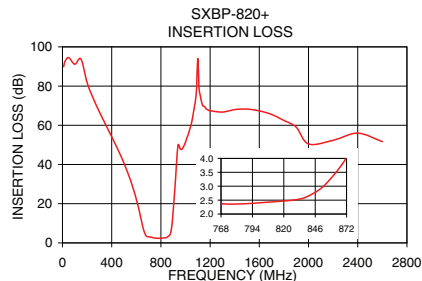


Functional Schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | | Return Loss (dB) | Frequency (MHz) | Group Delay (nSec) |
|-----------------|---------------------|----------|------------------|-----------------|--------------------|
| | \bar{x} | σ | | | |
| 10 | 89.91 | 3.72 | 0.01 | 760 | 5.22 |
| 100 | 91.17 | 3.09 | 0.01 | 766 | 5.27 |
| 450 | 47.71 | 0.32 | 0.18 | 769 | 5.30 |
| 550 | 32.51 | 0.37 | 0.46 | 772 | 5.33 |
| 619 | 17.67 | 0.77 | 0.88 | 778 | 5.41 |
| 640 | 11.85 | 0.92 | 1.63 | 790 | 5.62 |
| 658 | 6.91 | 0.76 | 3.61 | 799 | 5.83 |
| 769 | 2.37 | 0.19 | 9.46 | 808 | 6.09 |
| 799 | 2.40 | 0.13 | 9.95 | 820 | 6.56 |
| 820 | 2.47 | 0.11 | 12.51 | 829 | 7.13 |
| 850 | 2.90 | 0.28 | 17.04 | 838 | 8.04 |
| 872 | 4.05 | 0.30 | 15.27 | 850 | 8.96 |
| 880 | 5.13 | 0.54 | 19.23 | 859 | 9.11 |
| 890 | 9.27 | 1.73 | 5.58 | 868 | 8.91 |
| 900 | 16.48 | 2.56 | 2.71 | 872 | 8.73 |
| 920 | 33.32 | 3.78 | 1.36 | 874 | 8.61 |
| 1000 | 51.37 | 0.64 | 0.53 | 876 | 8.46 |
| 2600 | 51.67 | 0.63 | 0.36 | 880 | 8.01 |



For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuits' applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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.

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