

Surface Mount Bandpass Filter

SXBP-1430-75+

75Ω 950 to 2150 MHz

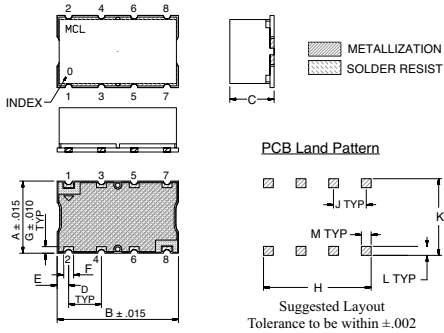
Maximum Ratings

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

Pin Connections

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

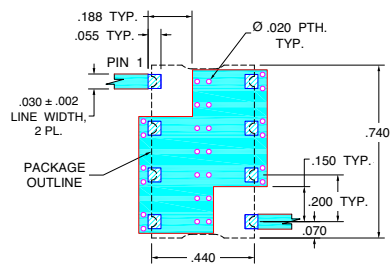
Outline Drawing



Outline Dimensions (inch/mm)

| A | B | C | D | E | F | G | H | J | K | L | M | wt. grams |
|------|------|------|------|------|------|-------|-------|------|-------|------|------|-----------|
| .440 | .740 | .19 | .200 | .07 | .060 | 11.18 | 18.80 | 4.83 | 5.08 | 1.78 | 1.52 | |
| .040 | .660 | .200 | .470 | .055 | .060 | 1.02 | 16.76 | 5.08 | 11.94 | 1.40 | 1.52 | 2.5 |

Demo Board MCL P/N: TB-466+ Suggested PCB Layout (PL-281)

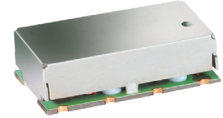


Features

- Wideband, 950 to 2150 MHz
- Flat Group Delay @ Passband, 0.6 nSec Typ
- Good VSWR, 1.3:1 Typ @ Passband
- Aqueous washable

Applications

- L-Band
- Receivers / Transmitters
- Wireless communication system



CASE STYLE: HF1317
PRICE: \$17.95 ea. QTY (1-9)

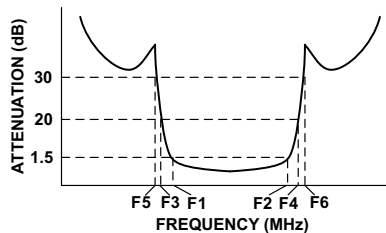
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

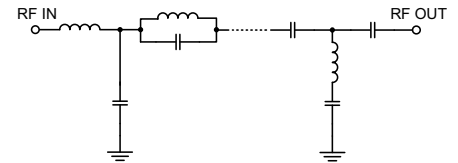
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

| CENTER FREQ. (MHz) | PASSBAND (MHz) (Loss < 1.5dB) | STOPBANDS (MHz) | | | | VSWR (:1) | | |
|--------------------|----------------------------------|-----------------|----------------|----------------|----------------|---------------|-----|----|
| | | Loss > 20dB | Loss 30dB Typ. | Passband Typ. | Passband Max. | Stopband Typ. | | |
| F _c | F ₁ - F ₂ | F ₃ | F ₄ | F ₅ | F ₆ | | | |
| 1430 | 950 - 2150 | 540 | 2950 | 530 | 3000 - 5000 | 1.3 | 1.9 | 20 |

Typical Frequency Response

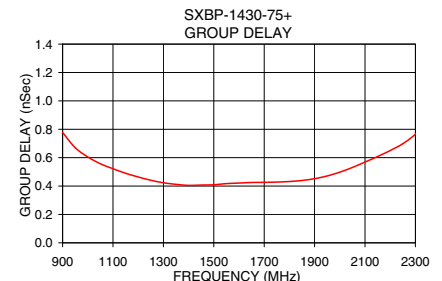
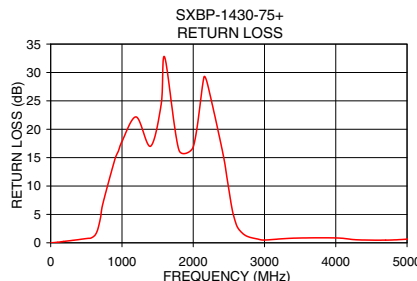
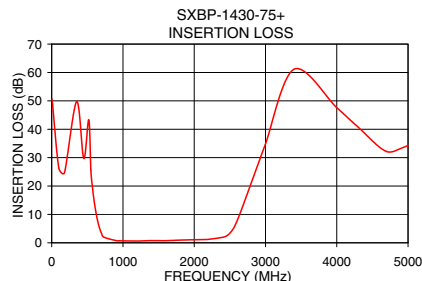


Functional Schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | | Return Loss (dB) | Frequency (MHz) | Group Delay (nSec) |
|-----------------|---------------------|----------|------------------|-----------------|--------------------|
| | \bar{x} | σ | | | |
| 5.0 | 50.63 | 0.39 | 0.01 | 900.0 | 0.78 |
| 530.0 | 35.18 | 2.03 | 0.77 | 950.0 | 0.67 |
| 540.0 | 29.53 | 1.19 | 0.77 | 1000.0 | 0.61 |
| 580.0 | 17.63 | 0.45 | 0.94 | 1100.0 | 0.52 |
| 630.0 | 9.50 | 0.26 | 1.47 | 1200.0 | 0.46 |
| 680.0 | 4.50 | 0.14 | 3.30 | 1300.0 | 0.42 |
| 725.0 | 2.17 | 0.06 | 6.37 | 1400.0 | 0.41 |
| 780.0 | 1.15 | 0.04 | 10.96 | 1430.0 | 0.41 |
| 950.0 | 0.56 | 0.02 | 20.73 | 1450.0 | 0.93 |
| 1430.0 | 0.60 | 0.03 | 18.82 | 1500.0 | 0.94 |
| 2150.0 | 0.97 | 0.02 | 24.15 | 1600.0 | 0.87 |
| 2425.0 | 1.65 | 0.06 | 20.56 | 1700.0 | 0.92 |
| 2500.0 | 2.50 | 0.28 | 17.51 | 1800.0 | 0.97 |
| 2575.0 | 6.28 | 0.86 | 5.39 | 1900.0 | 0.98 |
| 2650.0 | 13.27 | 1.06 | 2.06 | 2000.0 | 1.00 |
| 2800.0 | 29.07 | 1.38 | 1.11 | 2100.0 | 1.12 |
| 2850.0 | 36.43 | 1.93 | 1.05 | 2150.0 | 1.10 |
| 5000.0 | 38.05 | 1.34 | 0.63 | 2200.0 | 1.09 |



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Page 1 of 1