

# Low Pass Filter

PLP-450+

50Ω DC to 400 MHz

### Maximum Ratings

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

### Pin Connections

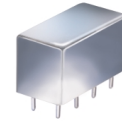
|             |             |
|-------------|-------------|
| INPUT       | 1           |
| OUTPUT      | 8           |
| GROUND      | 2,3,4,5,6,7 |
| CASE GROUND | 2,3,4,5,6,7 |

### Features

- rugged welded case, hermetic
- other standard and custom PLP models available with wide selection of fco

### Applications

- test equipment
- lab use
- transmitters/receivers
- military/hi-rel applications



CASE STYLE: A01  
PRICE: \$13.70 ea. QTY (1-9)

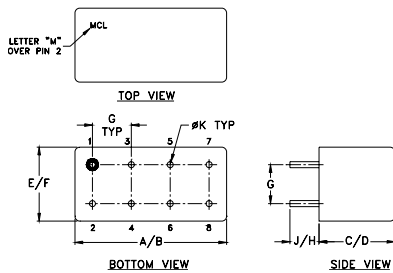
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

### Low Pass Filter Electrical Specifications

| PASSBAND (MHz) | fco (MHz) Nom. | STOPBAND (MHz) |                | VSWR (:1)     |               |
|----------------|----------------|----------------|----------------|---------------|---------------|
|                |                | (loss > 20 dB) | (loss > 40 dB) | Passband Typ. | Stopband Typ. |
| DC-400         | 440            | 580-750        | 750-1800       | 1.7           | 18            |

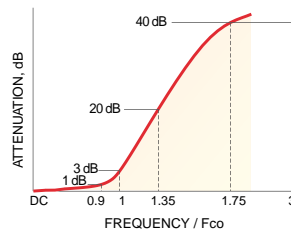
### Outline Drawing



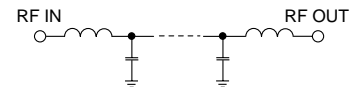
### Outline Dimensions (inch/mm)

| A     | B     | C    | D     | E     | F     |
|-------|-------|------|-------|-------|-------|
| .770  | .800  | .385 | .400  | .370  | .400  |
| 19.56 | 20.32 | 9.78 | 10.16 | 9.40  | 10.16 |
| G     | H     | J    | K     | wt    |       |
| .200  | .20   | .14  | .031  | grams |       |
| 5.08  | 5.08  | 3.56 | 0.79  | 5.2   |       |

### typical frequency response

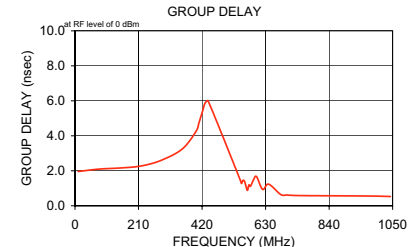
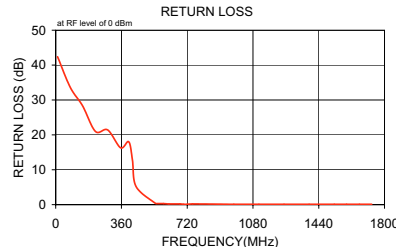


### electrical schematic



### Typical Performance Data

| Frequency (MHz) | Insertion Loss (dB) |          | Return Loss (dB) | Frequency (MHz) | Group Delay (nsec) |
|-----------------|---------------------|----------|------------------|-----------------|--------------------|
|                 | $\bar{x}$           | $\sigma$ |                  |                 |                    |
| 10.00           | 0.02                | 0.1      | 42.4             | 10.00           | 1.96               |
| 80.00           | 0.06                | 0.1      | 33.6             | 80.00           | 2.10               |
| 147.50          | 0.10                | 0.1      | 28.3             | 147.50          | 2.16               |
| 217.50          | 0.19                | 0.1      | 21.0             | 217.50          | 2.27               |
| 285.00          | 0.25                | 0.1      | 21.4             | 285.00          | 2.60               |
| 355.00          | 0.46                | 0.1      | 16.3             | 355.00          | 3.25               |
| 400.00          | 0.63                | 0.1      | 18.0             | 400.00          | 4.26               |
| 420.00          | 1.01                | 0.1      | 12.8             | 410.00          | 4.76               |
| 440.00          | 2.84                | 0.2      | 5.2              | 420.00          | 5.32               |
| 545.00          | 26.52               | 0.9      | 0.4              | 430.00          | 5.87               |
| 555.00          | 28.57               | 0.9      | 0.3              | 440.00          | 5.99               |
| 565.00          | 30.55               | 1.0      | 0.3              | 545.00          | 1.52               |
| 570.00          | 31.51               | 1.0      | 0.3              | 550.00          | 1.28               |
| 575.00          | 32.52               | 1.0      | 0.3              | 555.00          | 1.45               |
| 580.00          | 33.47               | 1.0      | 0.3              | 560.00          | 1.42               |
| 590.00          | 35.44               | 1.0      | 0.3              | 565.00          | 1.12               |
| 620.00          | 40.86               | 1.1      | 0.2              | 570.00          | 0.88               |
| 680.00          | 51.19               | 1.6      | 0.2              | 575.00          | 1.20               |
| 700.00          | 54.79               | 1.8      | 0.1              | 580.00          | 1.11               |
| 720.06          | 57.91               | 1.2      | 0.1              | 590.00          | 1.48               |
| 750.00          | 62.99               | 2.7      | 0.2              | 600.00          | 1.67               |
| 975.00          | 69.53               | 2.1      | 0.1              | 620.00          | 0.93               |
| 1112.50         | 78.46               | 9.9      | 0.1              | 640.00          | 1.24               |
| 1250.00         | 68.87               | 2.9      | 0.1              | 680.00          | 0.64               |
| 1387.50         | 69.76               | 8.2      | 0.1              | 700.00          | 0.62               |
| 1525.00         | 70.50               | 5.6      | 0.1              | 720.00          | 0.59               |
| 1592.50         | 68.09               | 0.9      | 0.1              | 750.00          | 0.58               |
| 1662.50         | 71.23               | 4.9      | 0.1              | 975.00          | 0.56               |
| 1730.00         | 72.22               | 6.0      | 0.1              | 1042.50         | 0.53               |
| 1800.00         | 67.80               | 4.1      | 0.1              | 1112.50         | 0.52               |



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



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RF/IF MICROWAVE COMPONENTS

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