

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

HT-PLP-300+



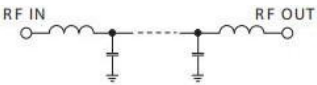
50Ω DC to 270 MHz

Maximum Ratings

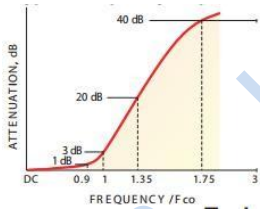
|                       |                |
|-----------------------|----------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature   | -55°C to 100°C |
| RF Power Input*       | 0.5W max.      |

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

electrical schematic



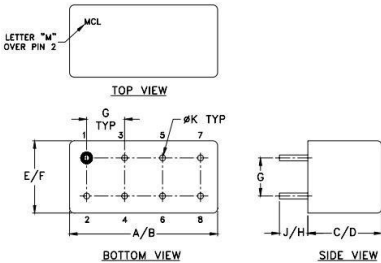
typical frequency response



Pad Connections

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

Outline Drawing



Outline Dimensions: Unit ( mm )

|   |       |    |       |     |       |
|---|-------|----|-------|-----|-------|
| A | 19.56 | B  | 20.32 | C   | 9.78  |
| D | 10.16 | E  | 9.40  | F   | 10.16 |
| G | 5.08  | H  | 5.08  | J   | 3.56  |
| K | 0.79  | wt |       | 5.2 |       |

Low Pass Filter Electrical Specifications (T<sub>AMB</sub>= 25°C)

| PASSBAND<br>(MHz) | fco (MHz)<br>Nom. | STOPBAND<br>(MHz) |             | VSWR<br>(:1)     |                  |
|-------------------|-------------------|-------------------|-------------|------------------|------------------|
|                   |                   | (Loss>20dB)       | (Loss>40dB) | Passband<br>Typ. | Stopband<br>Typ. |
| DC-270            | 297               | 410-1200          | 550-1200    | 1.7              | 18               |

Typical Performance Data at 25°C

| Frequency<br>(MHz) | Insertion Loss<br>(dB) |     | Return Loss<br>(dB) | Frequency<br>(MHz) | Group Delay<br>(nsec) |
|--------------------|------------------------|-----|---------------------|--------------------|-----------------------|
|                    | X                      | σ   |                     |                    |                       |
| 1.00               | 0.02                   | 0.1 | 47.4                | 1                  | 2.37                  |
| 49.00              | 0.13                   | 0.1 | 19.7                | 49                 | 2.20                  |
| 97.00              | 0.17                   | 0.1 | 18.2                | 97                 | 2.29                  |
| 145.00             | 0.15                   | 0.1 | 28.3                | 145                | 2.76                  |
| 193.00             | 0.28                   | 0.1 | 17.5                | 193                | 2.82                  |
| 241.00             | 0.36                   | 0.1 | 17.4                | 241                | 3.42                  |
| 270.00             | 0.53                   | 0.1 | 15.6                | 270                | 4.45                  |
| 280.00             | 1.00                   | 0.1 | 9.8                 | 275                | 5.14                  |
| 297.00             | 2.83                   | 0.2 | 4.3                 | 280                | 5.33                  |
| 300.00             | 3.29                   | 0.2 | 3.8                 | 290                | 5.24                  |
| 340.00             | 11.27                  | 0.3 | 0.7                 | 297                | 5.08                  |
| 360.00             | 15.31                  | 0.3 | 0.4                 | 300                | 4.75                  |
| 380.00             | 19.09                  | 0.4 | 0.3                 | 320                | 3.64                  |
| 400.00             | 22.62                  | 0.4 | 0.2                 | 340                | 2.79                  |
| 410.00             | 24.31                  | 0.4 | 0.2                 | 350                | 2.49                  |
| 450.00             | 30.64                  | 0.6 | 0.1                 | 360                | 1.91                  |
| 490.00             | 36.51                  | 0.9 | 0.1                 | 380                | 1.79                  |
| 520.00             | 40.88                  | 1.2 | 0.1                 | 400                | 1.15                  |
| 530.00             | 42.34                  | 1.3 | 0.1                 | 410                | 0.98                  |
| 540.00             | 43.72                  | 1.3 | 0.1                 | 450                | 0.88                  |
| 550.00             | 45.07                  | 1.5 | 0.1                 | 480                | 0.70                  |
| 700.00             | 66.82                  | 5.7 | 0.1                 | 490                | 1.16                  |
| 864.00             | 71.78                  | 6.6 | 0.1                 | 500                | 0.43                  |
| 960.00             | 76.06                  | 6.9 | 0.1                 | 520                | 2.11                  |
| 1056.00            | 70.05                  | 3.2 | 0.1                 | 530                | 0.67                  |
| 1110.00            | 73.87                  | 7.7 | 0.1                 | 540                | 0.65                  |
| 1120.00            | 72.31                  | 5.1 | 0.1                 | 550                | 0.63                  |
| 1140.00            | 76.33                  | 5.1 | 0.1                 | 700                | 0.61                  |
| 1150.00            | 72.33                  | 3.5 | 0.1                 | 800                | 0.59                  |
| 1200.00            | 77.29                  | 5.8 | 0.1                 | 864                | 0.58                  |

