

# Low Pass Filter

50Ω DC to 40 MHz

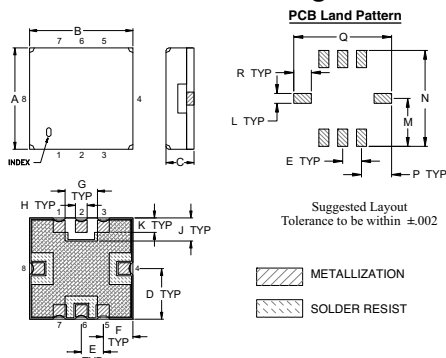
## Maximum Ratings

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

## Pin Connections

|        |                  |
|--------|------------------|
| RF IN  | 2                |
| RF OUT | 6                |
| GROUND | 1, 3, 4, 5, 7, 8 |

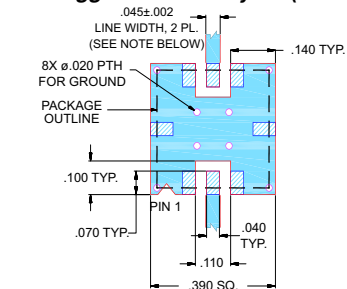
## Outline Drawing



## Outline Dimensions (inch/mm)

| A    | B    | C    | D    | E    | F    | G    | H     | J    |
|------|------|------|------|------|------|------|-------|------|
| .350 | .350 | .100 | .175 | .075 | .100 | .110 | .040  | .080 |
| 8.89 | 8.89 | 2.54 | 4.45 | 1.93 | 2.54 | 2.79 | 1.02  | 2.03 |
| K    | L    | M    | N    | P    | Q    | R    | wt.   |      |
| .050 | .040 | .195 | .390 | .120 | .390 | .070 | grams |      |
| 1.27 | 1.02 | 4.95 | 9.91 | 3.05 | 9.91 | 1.78 |       |      |

## Demo Board MCL P/N: TB-332 Suggested PCB Layout (PL-176)



## Features

- High rejection
- Sharp Insertion Loss roll off
- Excellent VSWR, 1.1:1 typ. @ Passband
- Aqueous washable

## Applications

- Wireless Broadband Access
- Receivers / Transmitters



CASE STYLE: GP731  
PRICE: \$7.95 ea. QTY (10-49)

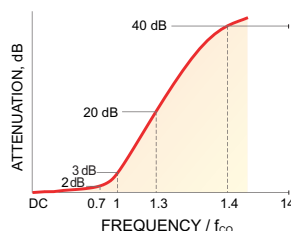
**+ RoHS compliant in accordance with EU Directive (2002/95/EC)**

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

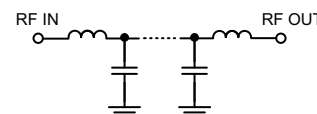
## Low Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

| PASSBAND (MHz) | f <sub>co</sub> , MHz Nom. | STOPBAND (MHz)              | VSWR (:1)                   |
|----------------|----------------------------|-----------------------------|-----------------------------|
| (Loss < 2dB)   | (Loss 3dB)                 | (Loss > 20dB) (Loss > 40dB) | Passband Typ. Stopband Typ. |
| DC - 40        | 56                         | 70 - 80 80 - 800            | 1.1 20                      |

## Typical Frequency Response

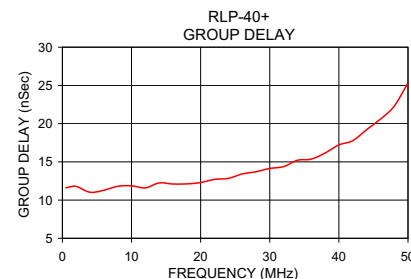
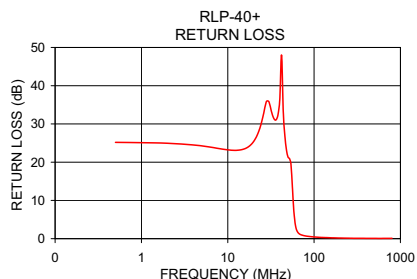
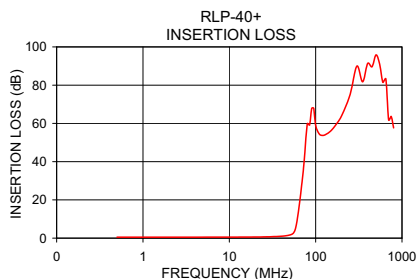


## Functional Schematic



## Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | Return Loss (dB) | Frequency (MHz) | Group Delay (nSec) |
|-----------------|---------------------|------------------|-----------------|--------------------|
| $\bar{x}$       | $\sigma$            |                  |                 |                    |
| 0.5             | 0.50                | 0.00             | 0.5             | 10.93              |
| 10.0            | 0.52                | 0.00             | 2.0             | 11.54              |
| 26.0            | 0.67                | 0.01             | 4.0             | 11.64              |
| 40.0            | 1.01                | 0.01             | 8.0             | 11.41              |
| 56.0            | 2.80                | 0.15             | 12.0            | 12.00              |
| 60.0            | 6.79                | 0.54             | 16.0            | 12.17              |
| 62.0            | 10.60               | 0.70             | 20.0            | 12.56              |
| 66.0            | 19.71               | 0.82             | 22.0            | 12.65              |
| 70.0            | 29.39               | 0.96             | 24.0            | 12.90              |
| 80.0            | 58.83               | 0.65             | 28.0            | 13.47              |
| 100.0           | 61.12               | 1.81             | 30.0            | 13.75              |
| 200.0           | 64.67               | 1.40             | 34.0            | 15.19              |
| 300.0           | 85.19               | 3.99             | 38.0            | 16.03              |
| 400.0           | 85.20               | 6.09             | 40.0            | 16.49              |
| 500.0           | 91.89               | 3.18             | 42.0            | 17.86              |
| 600.0           | 85.33               | 6.16             | 44.0            | 19.00              |
| 700.0           | 62.07               | 0.55             | 48.0            | 21.55              |
| 800.0           | 58.10               | 0.51             | 50.0            | 25.56              |



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