

# Coaxial Bandpass Filter



50Ω 0.35 to 0.45 MHz

## Features

- High Stopband rejection
- Sharp roll-off
- Connectorized package

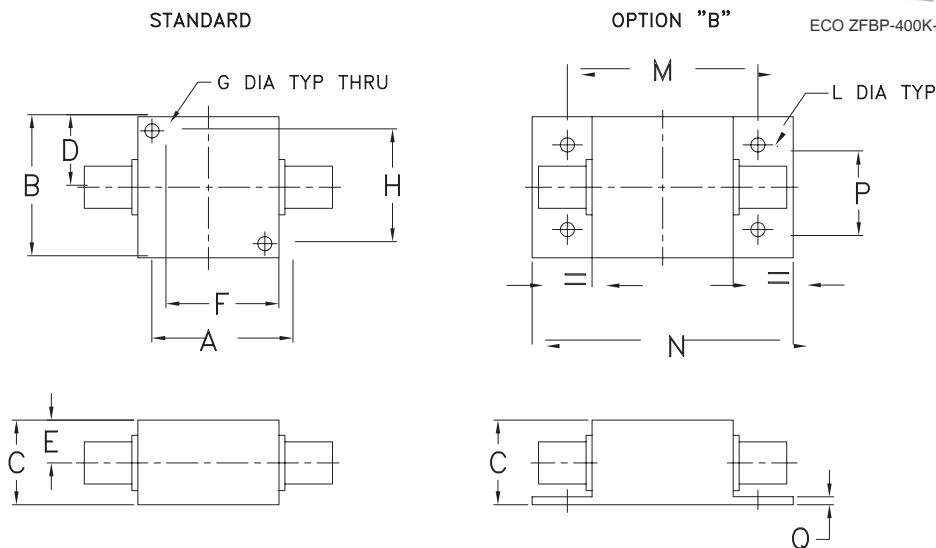
## Applications

- Harmonic rejection
- Instrumentation
- Industrial processing equipments
- Lab use

## Coaxial Connections

|          |            |
|----------|------------|
| PORT - 1 | SMA-FEMALE |
| PORT - 2 | SMA-FEMALE |

## Outline Drawing



## Outline Dimensions (inch mm)

| A     | B     | C     | D     | E    | F     | G    | H     |
|-------|-------|-------|-------|------|-------|------|-------|
| 1.25  | 1.25  | .75   | .63   | .38  | 1.000 | .125 | 1.000 |
| 31.75 | 31.75 | 19.05 | 16.00 | 9.65 | 25.40 | 3.18 | 25.40 |

| J  | K  | L    | M     | N     | P     | Q    | wt    |
|----|----|------|-------|-------|-------|------|-------|
| -- | -- | .125 | 1.688 | 2.18  | .750  | .06  | grams |
| -- | -- | 3.18 | 42.88 | 55.37 | 19.05 | 1.52 | 70.0  |

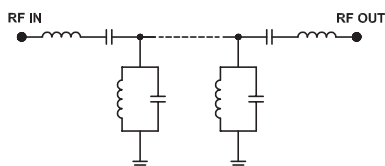
Note: Please refer to case style drawing for details

## 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.

## Functional Schematic



## Electrical Specifications at 25°C

| Parameter        | F#               | Frequency (MHz) | Min.        | Typ. | Max. | Unit |
|------------------|------------------|-----------------|-------------|------|------|------|
| Pass Band        | Center Frequency | —               | —           | 0.4  | —    | MHz  |
|                  | Insertion Loss   | F1-F2           | 0.35 - 0.45 | 1.1  | 3.0  | dB   |
|                  | VSWR             | F1-F2           | 0.35 - 0.45 | 1.5  | 2.0  | :1   |
| Stop Band, Lower | Insertion Loss   | DC-F3           | DC - 0.18   | 20   | 33   | dB   |
|                  | VSWR             | DC-F3           | DC - 0.18   | 67   | —    | :1   |
| Stop Band, Upper | Insertion Loss   | F4-F5           | 0.8 - 200   | 20   | 34   | dB   |
|                  | VSWR             | F4-F5           | 0.8 - 200   | 19   | —    | :1   |

## Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) | Frequency (MHz) | Group Delay (nsec) |
|-----------------|---------------------|-----------|-----------------|--------------------|
| 0.100           | 69.34               | 434.30    | 0.350           | 3952.77            |
| 0.180           | 34.59               | 69.49     | 0.352           | 3924.83            |
| 0.200           | 26.28               | 42.38     | 0.354           | 3886.64            |
| 0.225           | 15.16               | 16.72     | 0.356           | 3857.77            |
| 0.240           | 8.25                | 6.61      | 0.358           | 3825.18            |
| 0.255           | 3.22                | 2.10      | 0.400           | 3439.26            |
| 0.275           | 1.61                | 1.32      | 0.416           | 3390.83            |
| 0.350           | 1.09                | 1.41      | 0.420           | 3386.64            |
| 0.400           | 0.99                | 1.40      | 0.424           | 3378.61            |
| 0.450           | 0.93                | 1.19      | 0.426           | 3371.04            |
| 0.525           | 1.51                | 1.49      | 0.430           | 3364.52            |
| 0.560           | 3.96                | 3.59      | 0.432           | 3374.76            |
| 0.585           | 7.65                | 7.80      | 0.434           | 3375.23            |
| 0.625           | 14.37               | 18.90     | 0.436           | 3376.39            |
| 0.800           | 35.65               | 66.82     | 0.436           | 3376.39            |
| 1.200           | 60.56               | 173.72    | 0.438           | 3375.58            |
| 2.000           | 86.38               | 347.44    | 0.440           | 3390.13            |
| 50.000          | 98.50               | 347.44    | 0.442           | 3383.26            |
| 100.000         | 93.23               | 217.15    | 0.444           | 3386.29            |
| 200.000         | 85.40               | 29.46     | 0.450           | 3390.13            |

## Typical Frequency Response

