

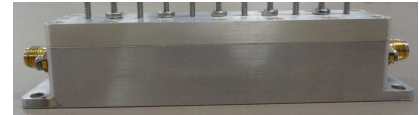
# Band Pass Cavity Filter

## Coaxial

# ZVBP-EDU2205

### Important Note

This model has been designed, built and tested in our engineering department. Performance data represents model capability. At present it is a non-catalog model. On request, we can supply a final specification sheet, part number and price/delivery information.



Please click "Back", and then click "Contact Us" for Applications support.

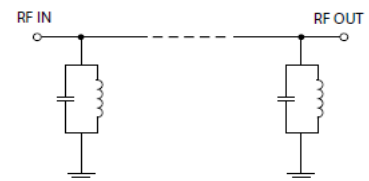
CASE STYLE: 99-01-EDU2205-2

### ELECTRICAL SPECIFICATIONS 50Ω @ +25°C

| Parameter                         | Min.  | Typ.  | Max.  | Units |
|-----------------------------------|-------|-------|-------|-------|
| Passband<br>(Loss < 3 dB)         | 11200 |       | 11400 | MHz   |
| Centre frequency<br>(Loss < 2 dB) |       | 11300 |       | MHz   |
| Low Band (Loss > 60 dB)           | DC    | 10940 |       | MHz   |
| Low Band (Loss > 20 dB)           | 10940 | 11120 |       | MHz   |
| High Band (Loss > 20 dB)          |       | 11490 | 11680 | MHz   |
| High Band (Loss > 60 dB )         |       | 11680 | 17000 | MHz   |
| Passband VSWR                     |       | 1.5   |       | (:1)  |
| Stopband VSWR                     |       | 19    |       | (:1)  |

### Functional Schematic

| MAXIMUM RATINGS       |                |
|-----------------------|----------------|
| Operating Temperature | -40°C to 85°C  |
| Storage Temperature   | -55°C to 100°C |
| RF Power Input        | 10W            |



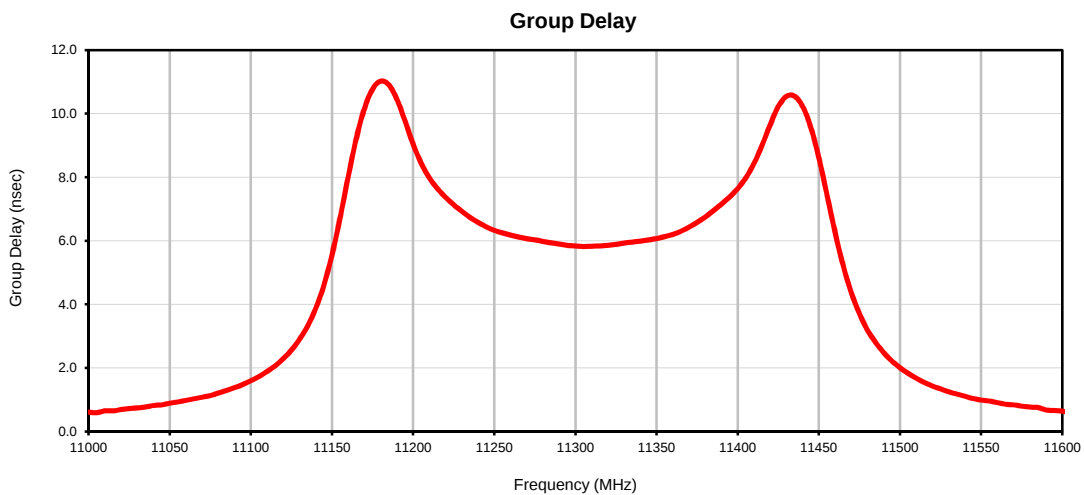
### PIN CONNECTIONS

|        |            |
|--------|------------|
| Input  | SMA Female |
| Output | SMA Female |

## Typical Performance Data

| FREQUENCY<br>(MHz) | INSERTION<br>LOSS<br>(dB) | RETURN<br>LOSS<br>(dB) | FREQUENCY<br>(MHz) | GROUP<br>DELAY<br>(nsec) |
|--------------------|---------------------------|------------------------|--------------------|--------------------------|
| 100                | 82.90                     | 0.03                   | 11200              | 9.04                     |
| 500                | 98.83                     | 0.04                   | 11205              | 8.44                     |
| 1000               | 94.28                     | 0.09                   | 11210              | 7.98                     |
| 10940              | 70.17                     | 0.20                   | 11215              | 7.64                     |
| 11000              | 59.77                     | 0.25                   | 11220              | 7.37                     |
| 11150              | 15.45                     | 1.42                   | 11230              | 6.93                     |
| 11120              | 28.59                     | 0.64                   | 11240              | 6.58                     |
| 11150              | 15.45                     | 1.42                   | 11250              | 6.33                     |
| 11175              | 3.79                      | 9.88                   | 11260              | 6.18                     |
| 11200              | 2.00                      | 18.39                  | 11270              | 6.07                     |
| 11250              | 1.60                      | 18.56                  | 11280              | 5.98                     |
| 11300              | 1.55                      | 17.56                  | 11290              | 5.90                     |
| 11350              | 1.67                      | 18.93                  | 11300              | 5.84                     |
| 11400              | 2.03                      | 18.93                  | 11310              | 5.83                     |
| 11425              | 2.95                      | 17.10                  | 11320              | 5.86                     |
| 11450              | 11.04                     | 2.24                   | 11330              | 5.93                     |
| 11490              | 28.55                     | 0.58                   | 11340              | 5.99                     |
| 11550              | 45.96                     | 0.32                   | 11350              | 6.07                     |
| 11600              | 56.52                     | 0.26                   | 11360              | 6.20                     |
| 11680              | 69.48                     | 0.22                   | 11370              | 6.43                     |
| 12000              | 95.78                     | 0.19                   | 11380              | 6.75                     |
| 15000              | 104.06                    | 0.39                   | 11390              | 7.15                     |
| 17000              | 103.53                    | 0.27                   | 11395              | 7.38                     |
| 20000              | 99.79                     | 0.21                   | 11400              | 7.64                     |

## Typical Performance Curves



All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

| Specification              | Test/Inspection Condition                                                                               | Reference/Spec                                        |
|----------------------------|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Operating Temperature      | -55° to 100°C<br>Ambient Environment                                                                    | Individual Model Data Sheet                           |
| Storage Temperature        | -55° to 100° C<br>Ambient Environment                                                                   | Individual Model Data Sheet                           |
| Humidity                   | 90 to 95% RH, 40°C, 96 hours;<br>Units may require bake-out after humidity to restore full performance. | MIL-STD-202, Method 103, Condition B                  |
| Thermal Shock              | -55° to 100°C, 100 cycles                                                                               | MIL-STD-202, Method 107, Condition A-3, except +100°C |
| Vibration (High Frequency) | 20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)                     | MIL-STD-202, Method 204, Condition D                  |
| Mechanical Shock           | 50g, 11ms half-sine, 3 shocks each direction 3 axes (total 18)                                          | MIL-STD-202, Method 213, Condition A                  |