*Coaxial*

# Bandpass Filter

## ZFBP-70HR-S+

50Ω  69 to 71 MHz



*Generic photo used for illustration purposes only*

CASE STYLE: H16

| Connectors | Model |
|---|---|
| **SMA-F** | ZFBP-70HR-S+ |
| **BRACKET (OPTION "B")** | |

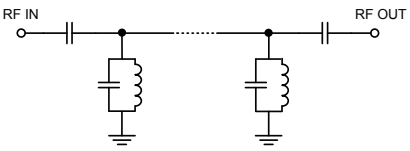
### Features

- Good VSWR, 1.2:1 Typ @ Passband
- Excellent Rejection in the Stopband
- Connectorized package

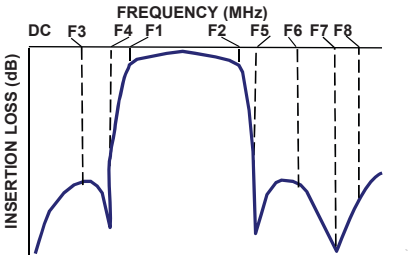
### Applications

- IF Signal Processing
- High Rejection Application
- Wire-Line Broadband Access
- Lab Use

### Functional Schematic




### Typical Frequency Response




***+RoHS Compliant***

*The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications*

### Electrical Specifications at 25°C

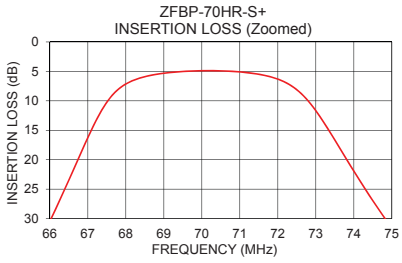
| Parameter | | F# | Frequency (MHz) | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|---|---|
| **Pass Band** | Center Frequency | - | - | - | 70 | - | MHz |
| | Insertion Loss | F1-F2 | 69 - 71 | - | 5.5 | 7.0 | dB |
| | VSWR | F1-F2 | 69 - 71 | - | 1.2 | 1.35 | :1 |
| **Stop Band, Lower** | Insertion Loss | DC-F3 | DC - 50 | 75 | 85 | - | dB |
| | | F3-F4 | 50 - 66 | 20 | 30 | - | dB |
| | VSWR | DC-F4 | DC - 66 | - | 18 | - | :1 |
| **Stop Band, Upper** | Insertion Loss | F5-F6 | 75 - 100 | 20 | 30 | - | dB |
| | | F6-F7 | 100 - 700 | 60 | 70 | - | dB |
| | | F7-F8 | 700 - 1000 | 50 | 60 | - | dB |
| | VSWR | F5-F8 | 75 - 1000 | - | 18 | - | :1 |

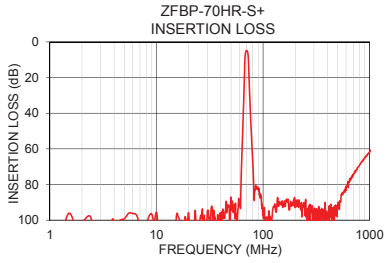
| Maximum Ratings | |
|---|---|
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input | 1 W at 25°C |

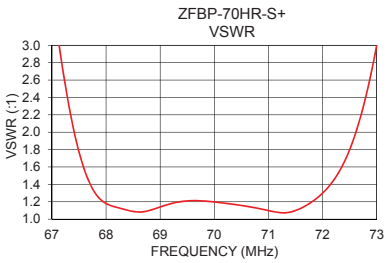
Permanent damage may occur if any of these limits are exceeded.

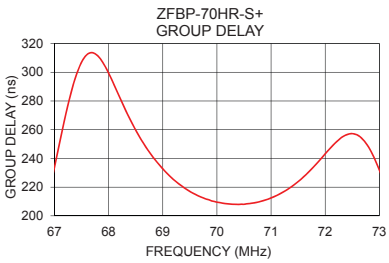
### Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) | Frequency (MHz) | Group Delay (ns) |
|---|---|---|---|---|
| 1.0 | 102.69 | 17007.26 | 69.0 | 232.76 |
| 10.0 | 95.63 | 7623.21 | 69.1 | 228.80 |
| 30.0 | 94.91 | 2561.53 | 69.2 | 225.24 |
| 50.0 | 87.17 | 521.91 | 69.3 | 222.15 |
| 64.0 | 54.64 | 31.49 | 69.4 | 219.43 |
| 66.0 | 30.47 | 10.34 | 69.5 | 217.03 |
| 66.7 | 20.57 | 5.31 | 69.6 | 215.02 |
| 67.0 | 16.25 | 3.62 | 69.7 | 213.21 |
| 68.0 | 7.14 | 1.18 | 69.8 | 211.71 |
| 69.0 | 5.31 | 1.14 | 69.9 | 210.45 |
| 70.0 | 4.89 | 1.20 | 70.0 | 209.54 |
| 71.0 | 5.08 | 1.10 | 70.1 | 208.88 |
| 74.0 | 21.94 | 7.65 | 70.2 | 208.41 |
| 75.0 | 31.62 | 13.83 | 70.3 | 208.09 |
| 80.0 | 67.41 | 56.77 | 70.4 | 207.97 |
| 90.0 | 81.62 | 163.24 | 70.5 | 208.06 |
| 100.0 | 96.57 | 248.57 | 70.6 | 208.55 |
| 505.0 | 89.99 | 88.51 | 70.7 | 209.11 |
| 700.0 | 74.48 | 73.71 | 70.8 | 210.00 |
| 1000.0 | 61.62 | 62.49 | 71.0 | 212.43 |



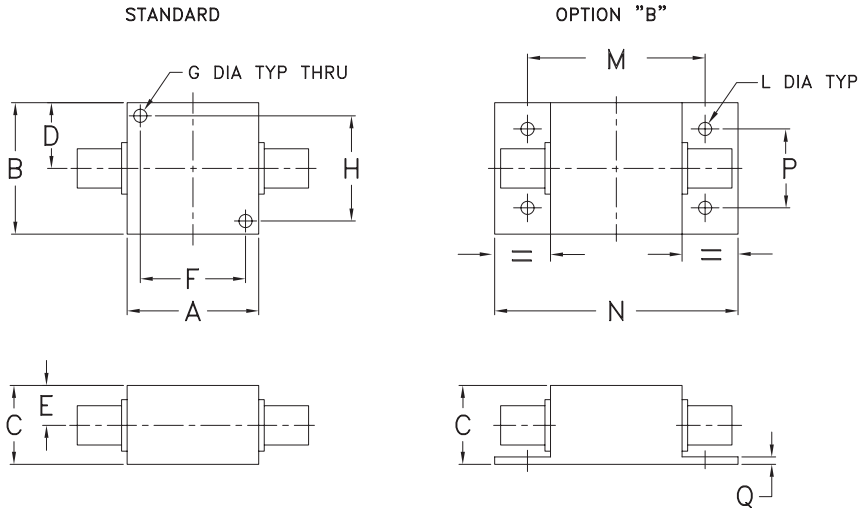

Notes

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## 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*

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