*Engineering Development Model*

# Band Pass Filter BPF-EDU2047

Surface Mount

### 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.

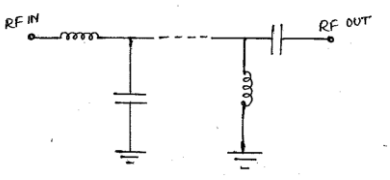
Please click "Back", and then click "Contact Us" for Applications support.

**99-01-2078**

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

| Parameter | Min. | Typ. | Max. | Units |
|---|---|---|---|---|
| **Passband (Loss < 7 dB )** | 185 | | 265 | MHz |
| **Centre frequency** | | 225 | | MHz |
| **Low Band (Loss > 20 dB)** | DC | 150 | | MHz |
| **High Band (Loss > 20 dB)** | | 300 | 4000 | MHz |
| **Passband VSWR** | | 1.8 | | (:1) |
| **Stopband VSWR** | | 20 | | (:1) |

**Functional Schematic**




**MAXIMUM RATINGS**

| | |
|---|---|
| **Operating Temperature** | -40°C to 85°C |
| **Storage Temperature** | -55°C to 100°C |
| **RF Power Input** | 0.1 W |

**PIN CONNECTIONS**

| | |
|---|---|
| **Input** | 1 |
| **Output** | 8 |
| **Ground** | 2-7,9-14 |

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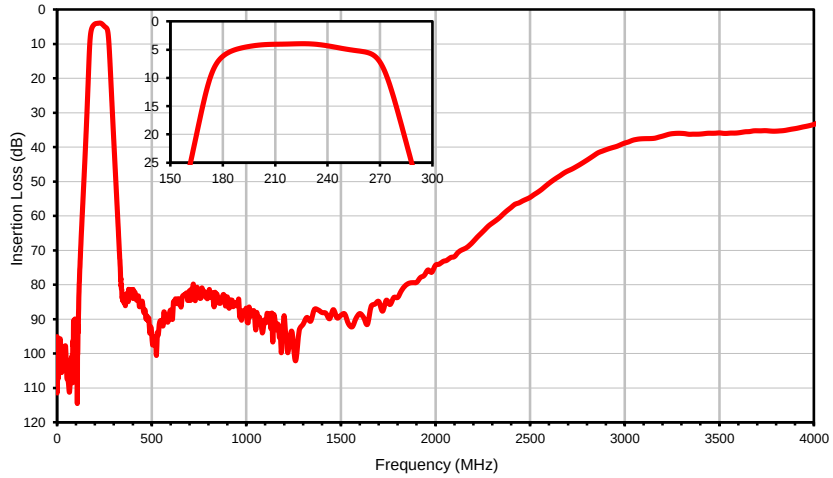
*Typical Performance Data*

| FREQUENCY (MHz) | INSERTION LOSS (dB) | RETURN LOSS (dB) | FREQUENCY (MHz) | GROUP DELAY (nsec) |
|---|---|---|---|---|
| 1.0 | 100.59 | 0.00 | 185 | 28.62 |
| 10.0 | 97.65 | 0.14 | 190 | 25.77 |
| 45.0 | 97.95 | 1.55 | 195 | 23.85 |
| 73.0 | 102.11 | 1.20 | 200 | 22.53 |
| 100.0 | 99.42 | 2.62 | 205 | 21.55 |
| 110.0 | 97.06 | 2.84 | 210 | 20.76 |
| 115.0 | 83.57 | 2.75 | 215 | 20.22 |
| 130.0 | 63.30 | 2.27 | 220 | 19.99 |
| 158.0 | 29.94 | 2.84 | 222 | 19.97 |
| 165.0 | 20.07 | 4.32 | 224 | 19.99 |
| 185.0 | 5.26 | 20.69 | 225 | 20.00 |
| 220.0 | 3.98 | 18.50 | 226 | 20.02 |
| 225.0 | 3.95 | 22.69 | 228 | 20.07 |
| 265.0 | 5.76 | 21.88 | 230 | 20.12 |
| 284.0 | 20.37 | 4.55 | 235 | 20.22 |
| 293.0 | 30.62 | 3.12 | 240 | 20.33 |
| 320.0 | 60.17 | 1.44 | 242 | 20.40 |
| 335.0 | 76.66 | 1.11 | 248 | 20.85 |
| 450.0 | 84.78 | 0.51 | 250 | 21.14 |
| 800.0 | 82.79 | 0.37 | 255 | 22.39 |
| 1200.0 | 88.99 | 0.44 | 260 | 24.73 |
| 1500.0 | 88.90 | 0.49 | 262 | 26.00 |
| 2500.0 | 54.62 | 0.52 | 264 | 27.37 |
| 4000.0 | 33.40 | 0.75 | 265 | 28.03 |

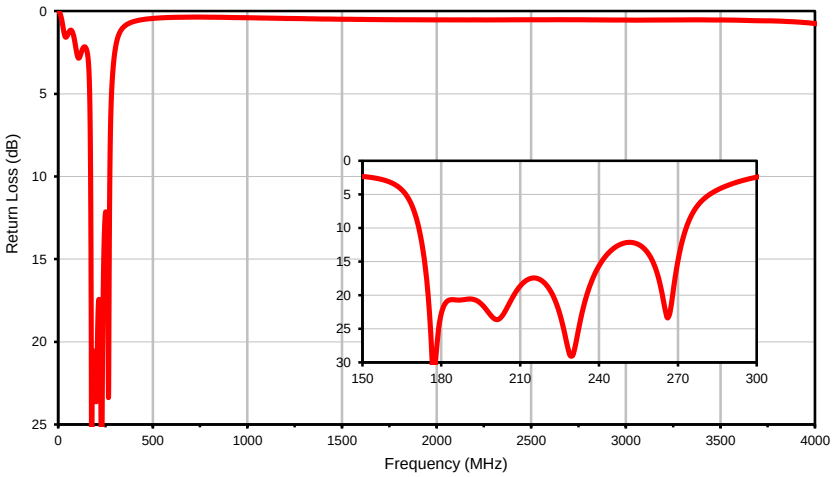
# Surface Mount Band Pass Filter BPF-EDU2047

## *Typical Performance Curves*

**Insertion Loss**




**Return Loss**




**Group Delay**