

Coaxial Bandpass Filter

NON-CATALOG

NIF-50+
NIF-50

50Ω Constant Impedance 41 to 58 MHz

Maximum Ratings

| | |
|-----------------------|----------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input | 0.5W max. |

Features

- low VSWR in pass & stopbands, 1.3:1 typ.
- rugged shielded case
- custom fo models available

Applications

- harmonic rejection
- lab use



CASE STYLE: FF57

| Connectors | Model | Price | Qty. |
|------------|-----------|---------------------|------|
| N-Type | NIF-50(+) | Contact Sales Dept. | |

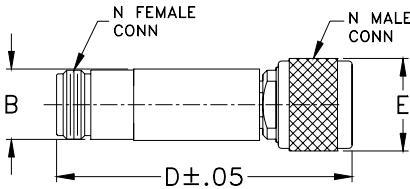
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

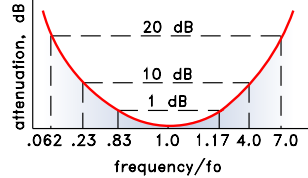
Bandpass Filter Electrical Specifications

| MODEL NO. | CENTER FREQ. (MHz) | PASSBAND (MHz) (loss < 1 dB) | STOPBANDS | | VSWR, 1.3:1 Typ. TOTAL BAND (MHz) |
|-----------|--------------------|---------------------------------|-----------------------|-----------------------|-----------------------------------|
| | | | (loss > 10 dB) at MHz | (loss > 20 dB) at MHz | |
| NIF-50(+) | 50 | 41-58 | 11.5 & 200 | 3.1 & 350 | DC-440 |

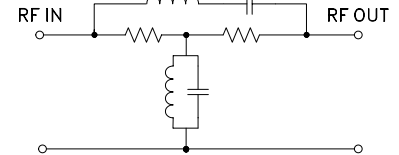
Outline Drawing



typical frequency response



Electrical Schematic

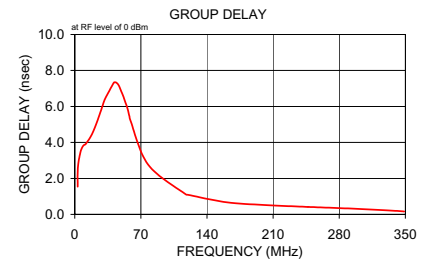
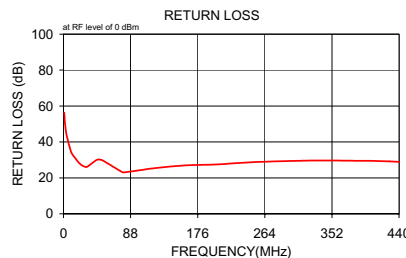
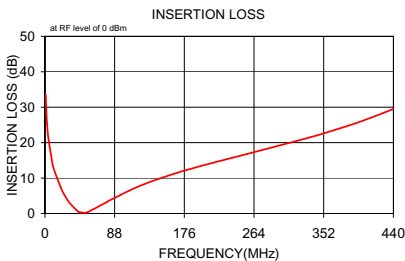


Outline Dimensions (inch/mm)

| B | D | E | wt |
|-------|-------|-------|-------|
| .67 | 2.90 | .82 | grams |
| 17.02 | 73.66 | 20.83 | 90.0 |

Typical Performance Data

| Frequency (MHz) | Insertion Loss (dB) | | Return Loss (dB) | Frequency (MHz) | Group Delay (nsec) |
|-----------------|---------------------|----------|------------------|-----------------|--------------------|
| | \bar{x} | σ | | | |
| 1.0 | 33.62 | 0.2 | 56.3 | 3.1 | 1.540 |
| 1.4 | 30.60 | 0.2 | 53.5 | 3.2 | 2.572 |
| 1.8 | 28.39 | 0.2 | 51.1 | 5.9 | 3.434 |
| 2.3 | 26.60 | 0.2 | 49.3 | 8.7 | 3.800 |
| 2.7 | 25.16 | 0.2 | 47.6 | 11.4 | 3.893 |
| 3.1 | 23.91 | 0.2 | 46.4 | 11.6 | 3.910 |
| 4.0 | 21.72 | 0.3 | 43.9 | 18.2 | 4.448 |
| 9.0 | 14.63 | 0.2 | 35.6 | 24.4 | 5.257 |
| 11.5 | 12.44 | 0.2 | 33.2 | 31.1 | 6.290 |
| 20.0 | 7.25 | 0.2 | 28.5 | 32.2 | 6.428 |
| 23.7 | 5.61 | 0.2 | 27.1 | 41.0 | 7.293 |
| 27.3 | 4.18 | 0.2 | 26.3 | 41.7 | 7.342 |
| 31.0 | 2.95 | 0.2 | 26.2 | 43.9 | 7.325 |
| 41.0 | 0.70 | 0.1 | 29.3 | 46.2 | 7.197 |
| 45.5 | 0.28 | 0.1 | 30.2 | 48.7 | 6.905 |
| 50.0 | 0.21 | 0.1 | 30.0 | 51.3 | 6.571 |
| 53.0 | 0.34 | 0.1 | 29.3 | 53.1 | 6.309 |
| 77.0 | 3.12 | 0.1 | 23.2 | 55.9 | 5.874 |
| 80.0 | 3.52 | 0.1 | 23.1 | 57.9 | 5.441 |
| 120.0 | 7.84 | 0.1 | 25.4 | 58.9 | 5.242 |
| 160.0 | 10.99 | 0.2 | 27.0 | 77.6 | 2.769 |
| 200.0 | 13.61 | 0.2 | 27.5 | 117.5 | 1.114 |
| 250.0 | 16.51 | 0.2 | 28.8 | 119.5 | 1.093 |
| 316.7 | 20.38 | 0.4 | 29.6 | 160.3 | 0.679 |
| 350.0 | 22.46 | 0.4 | 29.7 | 200.7 | 0.525 |
| 390.0 | 25.29 | 0.6 | 29.5 | 246.9 | 0.414 |
| 402.5 | 26.25 | 0.7 | 29.5 | 251.2 | 0.408 |
| 415.0 | 27.29 | 0.8 | 29.3 | 298.5 | 0.306 |



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

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IF/RF MICROWAVE COMPONENTS

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