*Coaxial*

# Low Pass Filter

## VLF-3800+

50Ω *DC to 3900 MHz

### Maximum Ratings

| | |
|---|---|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input* | 8W at 25°C |
| DC Current Input to Output | 0.5A max. at 25°C |

**Passband rating, derate linearly to 3 W at 100°C ambient*
Permanent damage may occur if any of these limits are exceeded.

### Features

- Rugged uni-body construction, small size
- 7 sections
- Excellent power handling, 8W
- Temperature stable
- Low cost
- Protected by US patent 6,943,646

### Applications

- Harmonic rejection
- Transmitters/receivers
- Lab use

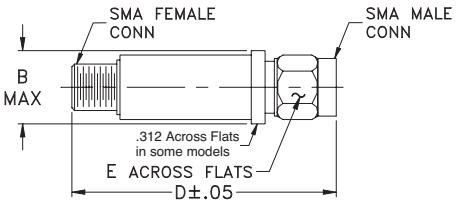
CASE STYLE: FF704

| Connectors | Model | Price | Qty. |
|---|---|---|---|
| **SMA** | VLF-3800+ | $ 21.95 ea. | (1-9) |

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

*The +suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.*

### Outline Drawing




### Outline Dimensions ( inch / mm )

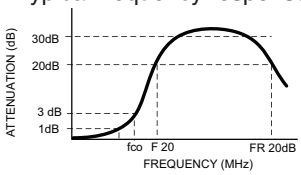
| B | D | E | wt. |
|---|---|---|---|
| .410 | 1.43 | .312 | grams |
| 10.41 | 36.32 | 7.92 | 10 |

### Low Pass Filter Electrical Specifications ($T_{AMB}$= 25°C)

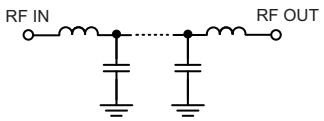
| PASSBAND (MHz) | fco, MHz Nom. | STOP BAND (MHz) (loss, dB) | | | VSWR (:1) | | NO. OF SECTIONS |
|---|---|---|---|---|---|---|---|
| (loss < 1 dB) Max. | (loss 3 dB) Typ. | F 20 Min. | 30 Typ. | FR 20 Typ. | Stopband Typ. | Passband Typ. | |
| *DC-3900 | 4850 | 6000 | 5700-8300 | 13000 | 17 | 1.3 | 7 |

** Not for use with DC voitage at input and output ports*

Typical frequency response

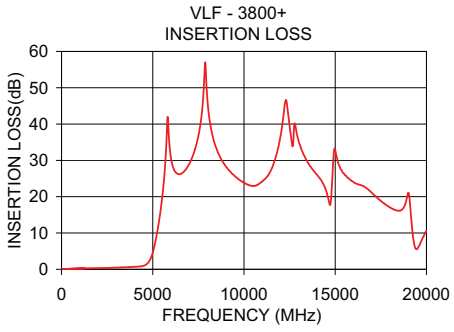


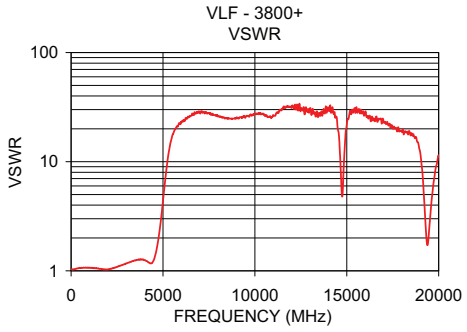

Electrical schematic




### Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|---|---|---|
| 40 | 0.01 | 1.03 |
| 1550 | 0.28 | 1.04 |
| 3060 | 0.47 | 1.18 |
| 3900 | 0.65 | 1.27 |
| 4510 | 1.00 | 1.27 |
| 4760 | 1.87 | 2.01 |
| 4850 | 2.60 | 2.60 |
| 4930 | 3.55 | 3.39 |
| 5120 | 7.00 | 6.76 |
| 5380 | 14.48 | 14.03 |
| 5700 | 30.38 | 20.22 |
| 6000 | 30.58 | 22.87 |
| 8300 | 36.33 | 25.56 |
| 13000 | 35.19 | 31.03 |
| 20000 | 10.55 | 11.46 |









REV. A
M129173
EDR-7684/1A
VLF-3800+
RAV
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