

Low Pass Filter

VLFX-1350

50Ω DC to 1350 MHz (40 dB Isolation up to 20 GHz)

Maximum Ratings

Operating Temperature -55°C to 100°C

Storage Temperature -55°C to 100°C

RF Power Input* 10W max. at 25°C

*Passband rating, derate linearly to 3.5W at 100°C ambient.

Features

- very good isolation, 40 dB up to 20 GHz
- 21 sections
- excellent power handling, 10W
- temperature stable LTCC internal structure
- re-entry frequency > 20 GHz
- rugged unibody construction
- protected by US patent 6,943,646

Applications

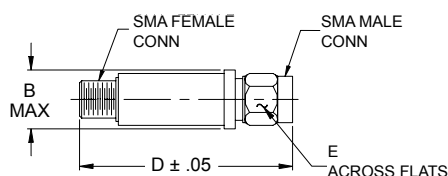
- harmonic rejection
- transmitters/receivers
- lab use
- test instrumentation



CASE STYLE: FF1118

| Connectors | Model | Price | Qty. |
|------------|-----------|-------------|-------|
| SMA | VLFX-1350 | \$39.95 ea. | (1-9) |

Outline Drawing



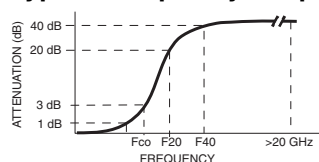
Outline Dimensions (inch/mm)

| B | D | E | wt. |
|-------|-------|------|-------|
| .410 | 2.67 | .312 | grams |
| 10.41 | 67.82 | 7.92 | 17.0 |

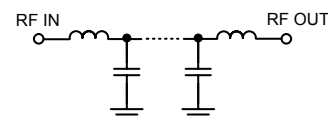
Low Pass Filter Electrical Specifications @ 25°C

| MODEL NO. | PASSBAND (MHz) (Loss < 1.2dB) Max. | Fco, MHz Nom (Loss 3 dB) Typ | STOPBAND (MHz) (Loss, dB) | | VSWR (:1) | | NO. OF SECTIONS |
|-----------|--|---------------------------------------|------------------------------|-------------|------------------|------------------|-----------------|
| | | | F20 Min. | F40 Typ. | Stopband Typ. | Passband Typ. | |
| VLFX-1350 | DC-1350 | 2050 | 2425 | 2600-20000 | 10 | 1.3 | 21 |

Typical Frequency Response

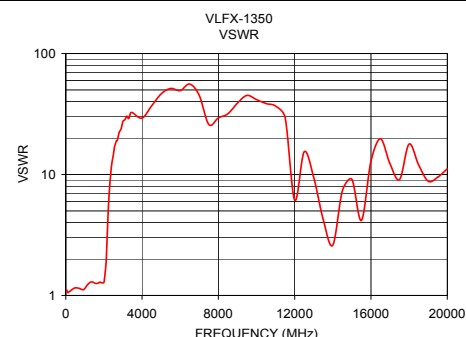
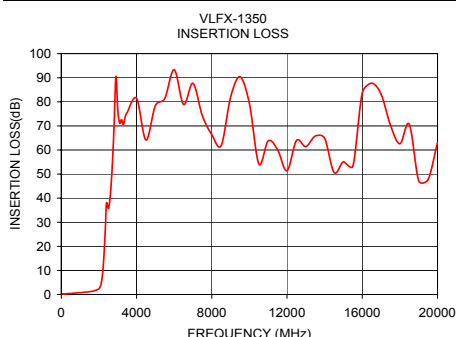


Functional Schematic



Typical Performance Data @ 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 50 | 0.30 | 1.11 |
| 250 | 0.20 | 1.09 |
| 500 | 0.42 | 1.16 |
| 1000 | 0.76 | 1.14 |
| 1350 | 1.04 | 1.29 |
| 1500 | 1.18 | 1.27 |
| 1800 | 1.66 | 1.29 |
| 2050 | 3.17 | 1.52 |
| 2200 | 9.27 | 3.96 |
| 2425 | 37.39 | 12.66 |
| 2600 | 40.80 | 17.87 |
| 3000 | 76.88 | 27.55 |
| 4000 | 81.43 | 29.27 |
| 5000 | 78.41 | 46.43 |
| 7500 | 74.23 | 25.88 |
| 10000 | 79.16 | 41.61 |
| 12500 | 63.92 | 15.38 |
| 15000 | 55.14 | 9.11 |
| 17500 | 70.26 | 9.10 |
| 20000 | 63.12 | 11.15 |



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RF/IF MICROWAVE COMPONENTS

REV. A
M97025
VLFX-1350
EDU-0399
ED-11930A/19
URJ/AD/CP
080916
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