

Coaxial Low Pass Filter

DC to 500 MHz (40 dB Isolation up to 20 GHz)

NEW!
VLFX-500

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
- temperature stable LTCC internal structure
- patent pending
- re-entry frequency > 20 GHz
- rugged stainless steel unibody

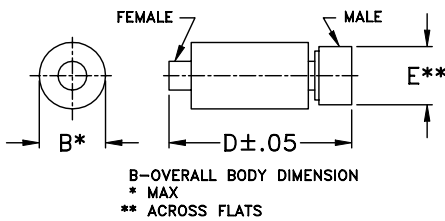


CASE STYLE: FF1118
PRICE: \$ 39.95 ea. QTY (1-9)

Applications

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

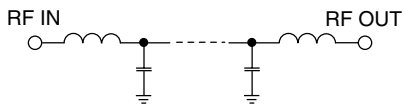
Outline Drawing



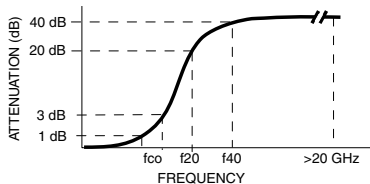
Outline Dimensions (inch/mm)

| B | D | E | wt. |
|------|-------|------|-------|
| .39 | 2.67 | .312 | grams |
| 9.91 | 67.82 | 7.92 | 17.0 |

Functional Schematic



Typical Frequency Response



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-500 | DC-500 | 750 | 900 | 1100-20000 | 10 | 1.15 | 21 |

Typical Performance Data @ 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 50 | 0.29 | 1.06 |
| 150 | 0.38 | 1.11 |
| 375 | 0.71 | 1.10 |
| 500 | 0.94 | 1.03 |
| 575 | 1.17 | 1.13 |
| 650 | 1.53 | 1.29 |
| 775 | 3.55 | 1.40 |
| 820 | 7.04 | 1.70 |
| 880 | 19.98 | 4.37 |
| 1000 | 39.25 | 9.44 |
| 2000 | 73.43 | 33.59 |
| 3000 | 77.47 | 67.57 |
| 4000 | 82.46 | 74.00 |
| 5000 | 61.14 | 15.25 |
| 7500 | 70.97 | 19.22 |
| 10000 | 64.81 | 30.61 |
| 12500 | 66.48 | 3.65 |
| 15000 | 55.46 | 16.68 |
| 17500 | 69.61 | 10.20 |
| 20000 | 69.43 | 5.42 |

