

# Coaxial Low Pass Filter

## VLFG-2600+

50Ω

DC to 2600 MHz



Generic photo used for illustration purposes only

CASE STYLE: FF704

## The Big Deal

- Excellent power handling, 4.5W
- Temperature stable
- Rugged unibody construction
- Good rejection, 50 dB typical

## Product Overview

VLFG-2600+ is a 50Ω low pass filter built in rugged unibody construction. Covering DC-2600 MHz bandwidth, these units offer good matching within the passband and good rejection in stopband. VLFG-2600+ offer low insertion loss, and excellent power handling capability. It handles up to 4.5W RF input power and provides a wide operating temperature range from -55°C to 125°C.

## Key Features

Feature	Advantages
Low passband insertion loss	Suitable for high performance application.
4.5W Power handling	Supports a range of system power requirements.
Connectorized package	The connectorized package is easy to interface with other devices and well suited for test setups.

### Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.  
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.  
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+RoHS Compliant

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

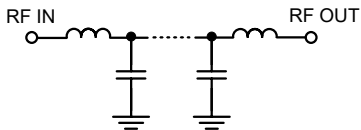
## Features

- Low loss, 1.3 dB typical
- Good rejection 50 dB typical
- Excellent power handling, 4.5W
- Temperature stable
- Connectorized package
- Rugged unibody construction

## Applications

- Military radar applications
- Test and measurement
- Telecommunication and broadband wireless applications

## Functional Schematic



## Electrical Specifications at 25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-F1	DC - 2600	—	1.3	2.2	dB
	Freq. Cut-Off	F2*	3000	—	3.0	—	dB
	Return Loss	DC-F1	DC - 2600	—	16	—	dB
Stop Band	Rejection Loss	F3-F4	3850 - 4200	20	50	—	dB
		F4-F5	4200 - 7000	34	43	—	dB
		F5-F6	7000 - 10000	—	30	—	dB
		F6-F7	10000 - 15000	—	25	—	dB

In Application where DC voltage is present at either input or output port, DC blocks are required.  
\* Typically, a ±5% frequency deviation from the stated value may occur on a unit-to-unit basis.

### Maximum Ratings

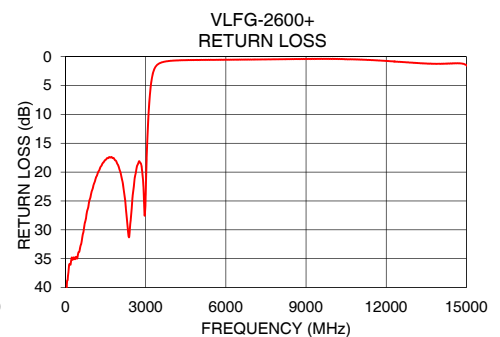
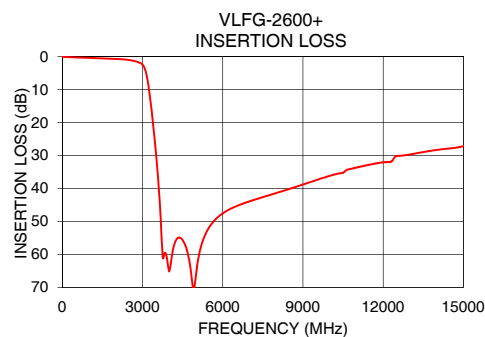
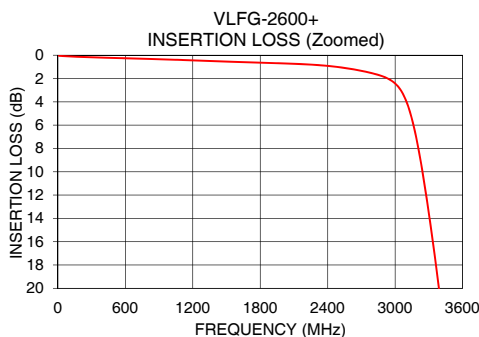
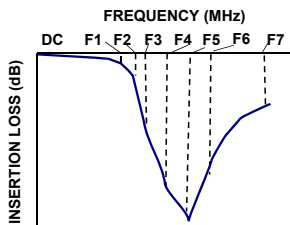
Operating Temperature	-55°C to 125°C
Storage Temperature	-55°C to 125°C
RF Power Input*	4.5W max. @25°C

\*Passband rating, derate linearly to 1W at 125°C ambient  
Permanent damage may occur if any of these limits are exceeded.

## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)
10	0.05	45.15
100	0.10	37.70
1000	0.38	23.11
1400	0.51	18.41
1800	0.64	17.56
2020	0.71	19.55
2400	0.92	30.42
2600	1.16	20.76
3000	2.43	23.98
3100	3.97	10.58
3300	13.60	2.43
3400	20.79	1.57
3450	24.75	1.34
3520	30.80	1.14
3850	59.49	0.76
4200	56.73	0.64
7000	43.91	0.49
10000	36.16	0.37
12000	32.06	0.73
15000	27.17	1.46

## Typical Frequency Response



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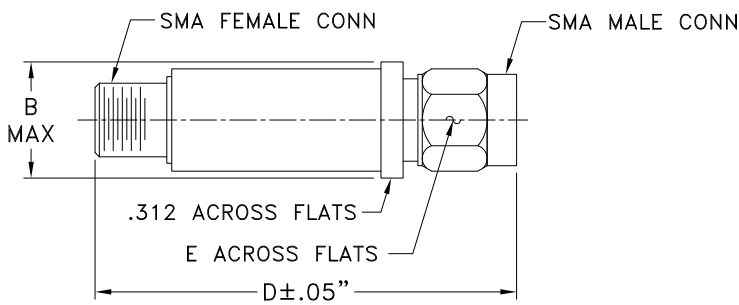


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Coaxial Connections

PORT - 1	SMA-Male
PORT - 2	SMA-Female

Outline Drawing



Outline Dimensions ( <sup>inch</sup> <sub>mm</sub> )

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

Note: Please refer to case style drawing for details

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