# Low Pass Filter

 $50\Omega$ 

\*DC to 1800 MHz

#### **Maximum Ratings**

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
BF Power Input*	10W max at 25°C

<sup>\*</sup> Passband rating, derate linearly to 3.5W 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, 10W
- temperature stable
- protected by U.S. Patent 6,943,646

- · low cost

# +RoHS Compliant

Generic photo used for illustration purposes only

CASE STYLE: FF704

Model

VLF-1800(+)

Connectors

SMA

VLF-1800+

**VLF-1800** 

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

### **Applications**

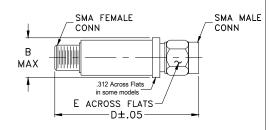
- harmonic rejection
- transmitters/receivers
- lab use

#### Electrical Specifications at 25°C

PASSBAND (MHz)	fco, MHz Nom.	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
(loss < 1 dB)	(loss 3 dB)	f 20	30	fr 20	Stopband	Passband	
Max.	Тур.	Min.	Тур.	Тур.	Тур.	Тур.	
*DC-1800	2125	2425	2500-7200	8600	20	1.2	7

<sup>\*</sup> Not for use with DC voltage at input and output ports

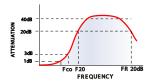
## **Outline Drawing**



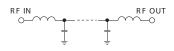
### Outline Dimensions (inch)

R D Е wt .410 .312 grams 1.43 10.41 36.32 7.92 10.0

### typical frequency response

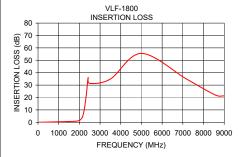


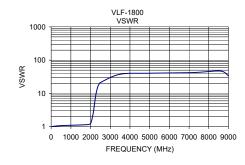
#### electrical schematic



# Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
50	0.05	1.02	
500	0.19	1.08	
1800	0.85	1.15	
2000	1.47	1.24	
2125	3.50	2.38	
2180	6.02	3.95	
2260	12.64	8.47	
2350	24.51	14.87	
2425	35.98	18.70	
2500	31.35	21.20	
3500	34.91	37.77	
5000	55.54	40.41	
7200	34.68	42.38	
8600	21.81	46.96	
9000	21.33	34.07	





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.

C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.ninicircuits.com/MCLStore/terms.jsp