# Low Pass Filter

#### $50\Omega$

### \*DC to 1575 MHz

#### **Maximum Ratings**

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	10W max. at 25°C
DC Current Input to Output	0.5A 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

#### **Applications**

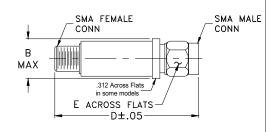
- harmonic rejection
- transmitters/receivers
- lab use

#### 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-1575	1875	2175	2225-6800	7100	20	1.2	7

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

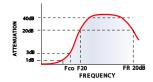
#### **Outline Drawing**



#### Outline Dimensions (inch)

В D Ε .410 1.43 .312 grams 10.41 36.32 7.92 10.0

#### typical frequency response



#### electrical schematic

VLF-1575+

Generic photo used for illustration purposes only

CASE STYLE: FF704

+RoHS Compliant The +Suffix identifies RoHS Compliance. See our web site

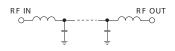
for RoHS Compliance methodologies and qualifications

Model

VLF-1575+

Connectors

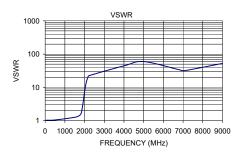
SMA



#### **Typical Performance Data**

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)		
50	0.06	1.03		
500	0.19	1.05		
1575	0.73	1.29		
1800	1.51	1.56		
1875	2.71	2.29		
1950	5.83	4.40		
2020	11.60	8.81		
2100	22.31	15.26		
2175	38.03	20.22		
2225	33.68	22.58		
4000	41.86	44.55		
5000	42.91	59.91		
6800	33.43	34.07		
7100	30.89	32.18		
9000	19.27	52.65		





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.minicircuits.com/MCLStore/terms.jsp

## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

 $\frac{\text{Mini-Circuits}}{\text{VLF-1575+}}$