# **Low Pass Filter**

### \*DC to 1400 MHz $50\Omega$

## **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.

## **Features**

- rugged uni-body construction, small size
- 7 sections
- excellent power handling, 10W
- temperature stable

**Applications**  harmonic rejection • transmitters/receivers

· low cost

• lab use

• protected by U.S. Patent 6,943,646

VLF-1400+

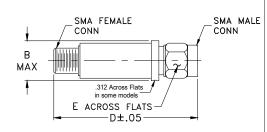
CASE STYLE: FF704

Connectors	Model
SMA	VLF-1400+

### +RoHS Compliant

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

## **Outline Drawing**



## Outline Dimensions (inch)

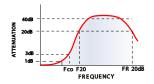
	Е	D	В
gra	.312	1.43	.410
1	7 92	36 32	10 41

## Electrical Specifications at 25°C

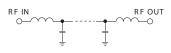
PASSBAND (MHz)	fco, MHz Nom.	STOP BAND (MHz) (loss, dB)		VSWR (:1)		NO. OF SECTIONS	
(loss < 1 dB)	(loss 3 dB)	f 20	30	fr 20	Stopband	Passband	
Max.	Тур.	Min.	Тур.	Тур.	Тур.	Тур.	
*DC-1400	1700	2015	2100-6600	6800	20	1.2	7

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

## typical frequency response

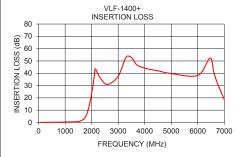


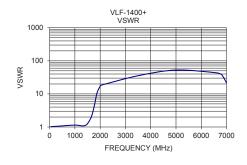
## electrical schematic



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
50	0.07	1.02	
500	0.17	1.08	
1000	0.35	1.14	
1400	0.62	1.10	
1600	1.28	1.67	
1700	2.55	2.67	
1790	5.56	5.25	
1880	11.44	10.96	
2015	25.70	17.75	
2100	37.96	18.90	
3500	53.01	35.46	
5000	39.77	52.65	
6600	41.25	43.44	
6800	28.87	38.61	
7000	18.61	21.73	





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