

# Coaxial Low Pass Filter

50Ω

\*DC to 400 MHz

VLF-400+



CASE STYLE: FF704

Connectors	Model
SMA	VLF-400+

**+RoHS Compliant**

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

## Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	8.5W max. at 25°C
DC Current Input to Output	0.5A max. at 25°C

\* 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, 8.5W
- temperature stable
- low cost
- protected by U.S. Patent 6,943,646

## Applications

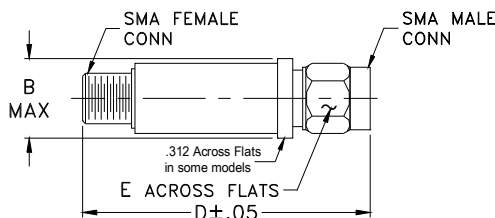
- harmonic rejection
- transmitters/receivers
- lab use

## Electrical Specifications at 25°C

PASSBAND (MHz) (loss < 1 dB)	f <sub>co</sub> , MHz Nom. (loss 3 dB)	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
		f 20 Min.	40 Typ.	fr 20 Typ.	Stopband Typ.	Passband Typ.	
Max.	Typ.	Min.	Typ.	Typ.	Typ.	Typ.	
*DC-400	560	660	680-3000	5500	20	1.2	7

\* Not for use with DC voltage at input and output ports

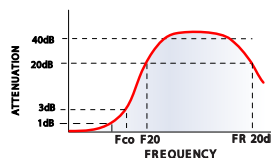
## Outline Drawing



## Outline Dimensions (inch/mm)

B	D	E	wt
.410	1.43	.312	grams
10.41	36.32	7.92	10.0

## typical frequency response

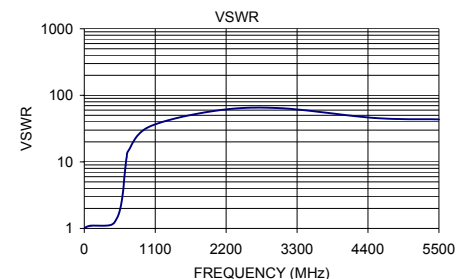


## electrical schematic



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1	0.06	1.02
100	0.27	1.10
400	0.80	1.12
500	1.44	1.39
560	2.77	2.01
600	5.87	3.54
620	9.82	5.72
650	20.09	10.62
660	24.64	12.01
680	35.49	14.50
1000	42.32	33.42
2000	59.01	57.91
3000	39.73	64.35
4500	23.58	45.72
5500	23.21	43.44



## Notes

- 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.
- 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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