

50Ω DC to 2350 MHz

The Big Deal

- Excellent power handling, 9W
- 5 Sections
- Rugged unibody construction





Product Overview

VLF-2350+ is a 50 Ω low pass filter built in rugged unibody construction. Covering DC-2350 MHz bandwidth, these units offer good matching within the passband and high rejection in stopband. VLF-2350+ offer low insertion loss, and excellent power handling capability.

Key Features

Feature	Advantages
Low passband insertion loss	Suitable for high performance application
9W 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.
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



Coaxial Low Pass Filter

50Ω DC to 2350 MHz

Features

- · Rugged uni-body construction, small size
- 5 Sections
- · Excellent power handling, 9W
- Temperature stable
- Protected by US patent 6,943,646

Applications

- Harmonic rejection
- Transmitters / Receivers
- Lab use

Functional Schematic



Typical Frequency Response



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

Electrical Specifications ⁽¹⁾ at 25°C							
Parameter		F#	Frequency (MHz)	Min.	Тур.	Max.	Unit
Pass Band	Insertion Loss	DC-F1	DC-2350	—	1	1.6	dB
	Freq. Cut-Off	F2	2700	—	3.0	—	dB
	VSWR	DC-F1	DC-2350	—	1.5	—	:1
	Insertion Loss	F3	3600	20	—	—	dB
		F4-F6	3700-4000	—	30	—	dB

3800

5000

VSWR F3-F7 20 3600-5000 (1) In Application where DC voltage is present at either input or output ports, coupling capacitors are required.

F5

F7

Maximum Ratings			
Operating Temperature	-55°C to 100°C		
Storage Temperature	-55°C to 100°C		
RF Power Input*	9W max. at 25°C		

*Passband rating derated linearly to 4W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.

Stop Band

Typical Performance Data at 25°C

Typical Ferformance Data at 25 C						
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)		
10	0.02	1.01	10	0.36		
100	0.06	1.02	100	0.34		
500	0.15	1.12	200	0.34		
1000	0.25	1.16	300	0.34		
2000	0.52	1.28	350	0.34		
2700	3.71	4.77	400	0.34		
2800	5.33	7.12	500	0.35		
2900	7.30	10.70	750	0.35		
3000	9.52	15.77	900	0.36		
3100	11.95	22.39	1000	0.36		
3200	14.57	30.13	1250	0.37		
3390	20.20	44.90	1500	0.39		
3500	24.21	52.23	1750	0.41		
3600	28.93	58.20	1800	0.42		
3620	30.10	59.76	1900	0.43		
3700	36.22	62.49	2000	0.45		
3800	43.86	65.86	2100	0.47		
3900	35.07	67.13	2200	0.50		
4000	30.79	68.35	2300	0.53		
5000	21.37	72.48	2350	0.55		

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CASE STYLE: FF704 Connectors Model SMA VLF-2350+

40

20

dB

dB

:1



Coaxial Connections

INPUT SMA-Female OUTPUT SMA-Male

Outline Drawing



Outline Dimensions (inch)

В	D	Е	wt.
.410	1.43	.312	grams
10.41	36.32	7.92	10

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