Coaxial

Low Pass Filter

VLF-180+
VLF-180

50Ω DC to 180 MHz



CASE STYLE: FF704

Connectors	Model
SMA	VLF-180+
SMA	VLF-180

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	8W at 25°C
DC Current Input to Output	0.5A max. at 25°C

Passband rating, derate linearly to 3 W at 100°C ambient
Permanent damage may occur if any of these limits are exceeded.

Features

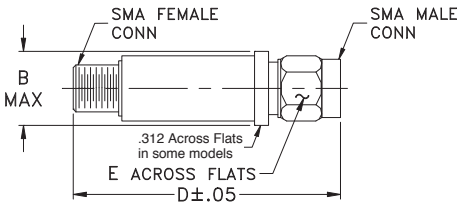
- Rugged uni-body construction, small size
- 7 sections
- Excellent power handling, 8W
- Temperature stable
- Low cost
- Protected by US patent 6,943,646

Applications

- Harmonic rejection
- Transmitters/receivers
- Lab use

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

Outline Drawing



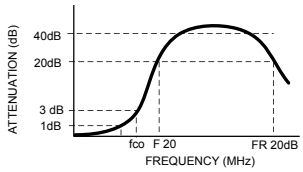
Outline Dimensions (inch / mm)

B	D	E	wt.
.410	1.43	.312	grams
10.41	36.32	7.92	10

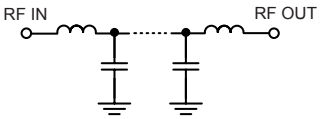
Low Pass Filter Electrical Specifications (T_{AMB}= 25°C)

PASSBAND (MHz)	fco, MHz Nom.	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
(loss < 1 dB) Max.	(loss 3 dB) Typ.	F 20 Min.	40 Typ.	FR 20 Typ.	Stopband Typ.	Passband Typ.	
DC - 180	270	370	525 - 2350	6400	17	1.2	7

Typical frequency response

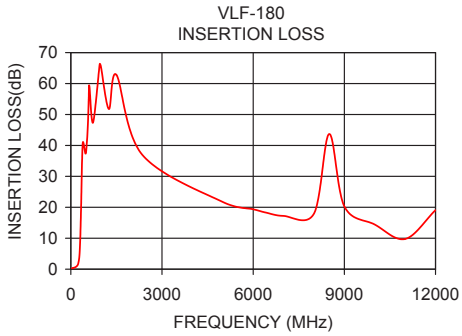


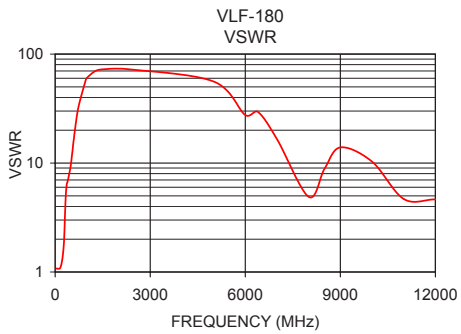
Electrical schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
40	0.26	1.08
100	0.46	1.08
180	0.84	1.14
235	1.55	1.39
270	3.14	1.81
300	7.42	2.86
325	14.85	4.43
350	25.50	5.77
370	35.45	6.32
525	40.87	11.69
950	66.29	52.65
1700	52.11	62.05
2350	37.00	66.82
4500	23.37	31.03
6400	18.35	28.03
8500	43.67	9.53
12000	19.07	4.69





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