

Coaxial Low Pass Filter

VLFG-630+

50Ω DC to 630 MHz



Generic photo used for illustration purposes only
CASE STYLE: FF704

The Big Deal

- Good power handling, 3 W
- Temperature stable
- Rugged unibody construction
- Good rejection, 46 dB typical

Product Overview

VLFG-630+ is a 50Ω low pass filter built in rugged unibody construction. Covering DC-630 MHz bandwidth, these units offer good matching within the passband and good rejection in stopband. VLFG-630+ offer low insertion loss, and good power handling capability. It handles up to 3W RF input power and provides a wide operating temperature range from -55°C to 100°C.

Key Features

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



Low Pass Filter

VLFG-630+

50Ω DC to 630 MHz



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

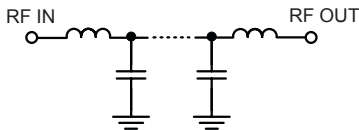
Features

- Low loss, 1.5 dB typical
- Good rejection 46 dB typical
- Good power handling, 3 W
- Temperature stable
- Connectorized package
- Rugged unibody construction

Applications

- Harmonic Rejection
- VHF/UHF transmitters / receivers
- Military radar applications
- Test and measurement
- Telecommunications & broadband wireless applications
- Satcom modems

Functional Schematic



Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Insertion Loss	DC-F1	DC - 630	—	1.5	2.1	dB
	Freq. Cut-Off	F2	780	—	3.0	—	dB
	VSWR	DC-F1	DC - 630	—	1.5	—	:1
Stop Band	Rejection Loss	F3-F4	1050 - 1500	20	50	—	dB
		F4-F5	1500 - 3800	35	46	—	dB
	VSWR	F5-F6	3800 - 8500	—	21	—	dB
		F3-F6	1050 - 8500	—	20	—	:1

Maximum Ratings

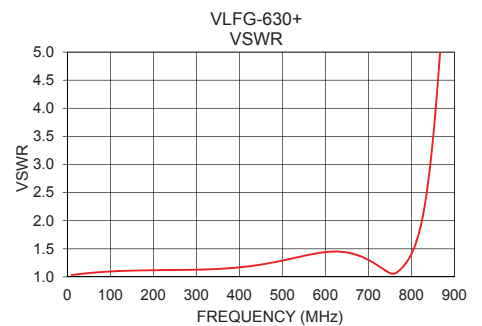
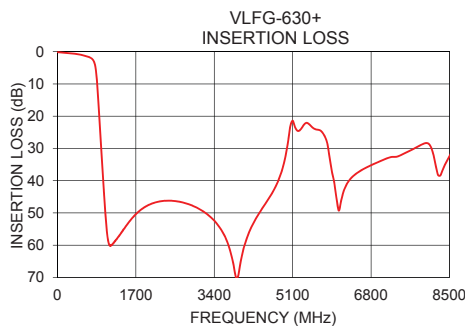
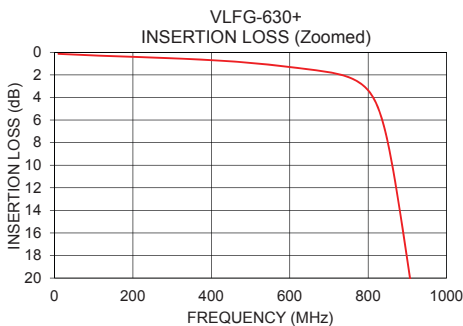
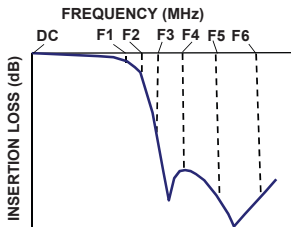
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	3 W max. @25°C

*Passband rating, derate linearly to 1.2 W at 100°C ambient
Permanent damage may occur if any of these limits are exceeded.

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
10	0.13	1.04
100	0.27	1.13
500	0.94	1.23
600	1.30	1.42
630	1.43	1.45
780	2.74	1.23
800	3.37	1.29
910	20.78	6.02
950	30.19	9.12
1000	41.66	13.20
1050	52.12	17.41
1500	53.83	45.15
2000	47.40	54.44
2400	46.22	58.56
3000	48.23	65.78
3800	64.87	71.53
4000	63.26	70.90
5000	27.91	23.26
7000	33.95	40.60
8500	32.39	8.48

Typical Frequency Response



Notes

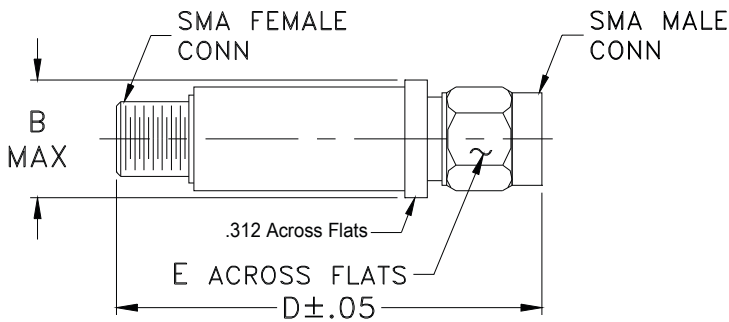
- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
- 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 Connections

PORT - 1	SMA-Male
PORT - 2	SMA-Female

Outline Drawing



Outline Dimensions (inch / mm)

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

Note: Please refer to case style drawing for details

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



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Signal Conditioning](#) category:

Click to view products by [Mini-Circuits](#) manufacturer:

Other Similar products are found below :

[MAPDCC0001](#) [MAPDCC0004](#) [PD0409J5050S2HF](#) [880157](#) [HHS-109-PIN](#) [DC1417J5005AHF](#) [AFS14A30-2185.00-T3](#) [AFS14A35-1591.50-T3](#) [DS-323-PIN](#) [B39321R801H210](#) [1A0220-3](#) [JP510S](#) [LFB212G45SG8C341](#) [LFB322G45SN1A504](#) [LFL182G45TC3B746](#) [SF2159E](#) [30057](#)
[FM-104-PIN](#) [CER0813B](#) [MAPDCC0005](#) [3A325](#) [40287](#) [41180](#) [ATB3225-75032NCT](#) [BD0810N50100AHF](#) [BD2425J50200AHF](#)
[C5060J5003AHF](#) [JHS-115-PIN](#) [JP503AS](#) [DC0710J5005AHF](#) [DC2327J5005AHF](#) [DC3338J5005AHF](#) [43020](#) [LFB2H2G60BB1C106](#)
[LFL15869MTC1B787](#) [X3C19F1-20S](#) [XC3500P-20S](#) [10013-20](#) [SF2194E](#) [CDBLB455KCAX39-B0](#) [TGL2208-SM, EVAL](#) [RF1353C](#)
[PD0922J5050D2HF](#) [1E1305-3](#) [1G1304-30](#) [B0922J7575AHF](#) [2020-6622-20](#) [TP-102-PIN](#) [TP-103-PIN](#) [BD1222J50200AHF](#)