# Coaxial

# Low Pass Filter

## $50\Omega$

# \*DC to 630 MHz

#### **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

<sup>\*</sup> Passband rating, derate linearly to 3.5W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded

- rugged uni-body construction, small size
- 7 sections
- excellent power handling, 8.5W
- temperature stable
- · low cost

• lab use

• protected by U.S. Patent 6,943,646

#### **Features**

**Applications**  harmonic rejection • transmitters/receivers

**VLF-630+** 

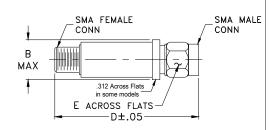
CASE STYLE: FF704

Connectors	Model
SMA	VLF-630(+)

#### +RoHS Compliant

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

# **Outline Drawing**



## Outline Dimensions (inch )

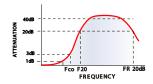
wt	Ε	D	В
grams	.312	1.43	.410
10.0	7 92	36.32	10 41

# Electrical Specifications at 25°C

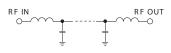
PASSBAND (MHz)	fco, MHz Nom.	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
(loss < 1.2 dB)	(loss 3 dB)	f 20	40	fr 20	Stopband	Passband	
Max.	Тур.	Min.	Тур.	Тур.	Тур.	Тур.	
*DC-630	830	1000	1050-3500	6000	20	1.2	7

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

## typical frequency response

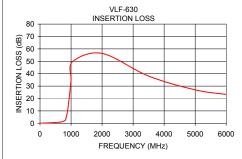


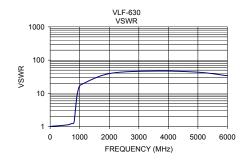
### electrical schematic



# Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1	0.05	1.01
100	0.19	1.04
350	0.42	1.08
630	0.89	1.15
700	1.17	1.22
800	2.16	1.30
830	3.34	1.92
880	8.80	5.25
910	14.08	8.64
960	24.64	13.92
1000	35.29	16.72
1050	49.74	18.50
2000	56.37	39.49
3500	38.09	46.96
5000	26.98	43.44
6000	23.24	34.07





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.ninicircuits.com/MCLStore/terms.jsp