

High Pass Filter

VHF-3100+

50Ω 3400 to 9900 MHz

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	7W max. at 25°C

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

Features

- Rugged uni-body construction, small size
- 5 sections
- Temperature stable
- Excellent power handling, 7W
- Low cost

Application

- Sub-harmonic rejection and DC blocking
- Transmitters/Receivers
- Lab use



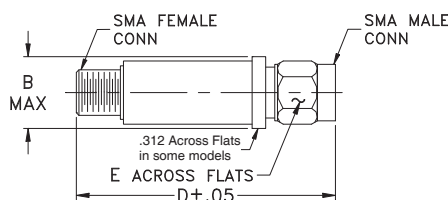
CASE STYLE: FF704

Connectors	Model
SMA	VHF-3100+

+RoHS Compliant

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

Outline Drawing



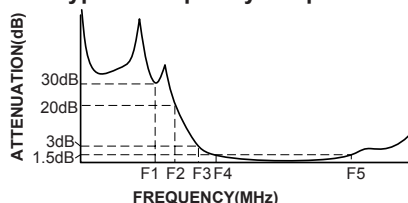
Outline Dimensions (inch/mm)

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

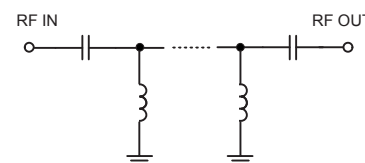
High Pass Filter Electrical Specifications (T_{AMB} = 25°C)

STOPBAND (MHz)		f _{co} , MHz	PASSBAND (MHz)		VSWR		NO. OF SECTIONS
(Loss > 30dB)	(Loss > 20dB)	Nom.	(Loss < 1.5dB)	(Loss < 2dB)	Stopband	Typ. Frequency	
Typ. DC-F1	Min. DC-F2	Typ. F3	Max. F4-F5	Max.		(MHz) 1.5:1	
DC-2500	DC-2450	3100	3500-9500	3400-9900	20:1	3100-10500	5

Typical Frequency Response

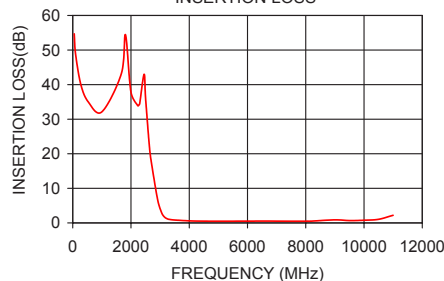
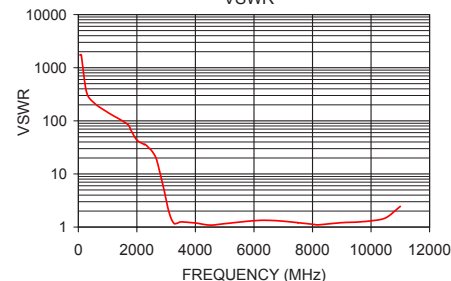


Electrical schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	54.69	1737.18
800	32.70	124.09
1810	54.43	64.35
2450	42.98	29.46
2500	36.08	27.59
2700	17.52	16.56
2920	6.49	5.25
3100	2.20	1.89
3400	0.91	1.19
3500	0.83	1.25
5000	0.48	1.16
7000	0.52	1.29
9000	0.87	1.21
9500	0.68	1.24
9900	0.74	1.29
10500	1.04	1.49
11000	2.20	2.45

VHF-3100+
INSERTION LOSSVHF-3100+
VSWR

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

