

High Pass Filter

HFCN-3500+

50Ω 3900 to 9800 MHz



Maximum Ratings

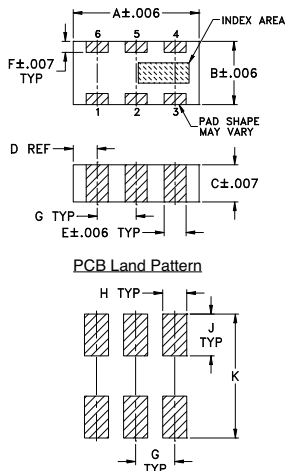
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	7W max. at 25°C

*Passband rating, derate linearly to 3W at 100°C ambient.

Pin Connections

RF IN	1
RF OUT	3
GROUND	2,4,5,6

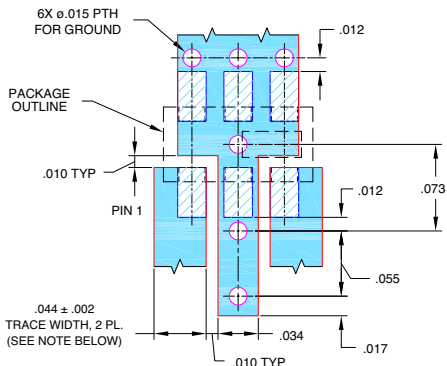
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	wt.
.126	.063	.035	.024	.022	.011	.039	.024	.042	.123	grams
3.20	1.60	0.91	0.61	0.56	0.28	0.99	0.61	1.07	3.12	.020

Demo Board MCL P/N: TB-285 Suggested PCB Layout (PL-158)



Features

- Low Cost
- Small size
- 5 sections
- Temperature stable
- Excellent power handling, 7W
- DC block in/out, breakdown voltage, 1kV typ.
- Patent pending

Application

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

CASE STYLE: FV1206-1

Model	Price	Qty.
HFCN-3500+	\$2.99	(10-49)
HFCN-3500D+	\$3.49	(10-49)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

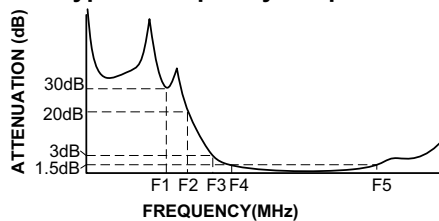
The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

High Pass Filter Electrical Specifications¹ (T_{AMB} = 25°C)

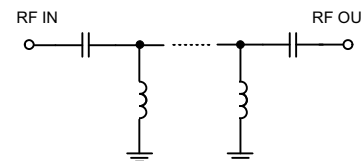
STOPBAND (MHz)	f _{co} , MHz	PASSBAND (MHz)	VSWR	POWER	NO. OF SECTIONS
(Loss>30dB)	Nom.	(Loss<1.5dB)	Typ.	INPUT	
Typ. DC-F1	Typ. F3	Max. F4-F5	Stopband Frequency (MHz)	Max.	
DC-2900	3500	4000-8800	20:1	7	5
DC-2800		3900-9800	3650-9500		

1. For Applications requiring DC voltage to be applied to the input or output, use HFCN-3500D+ (DC Resistance to ground is 100 Mohms min.)

Typical Frequency Response



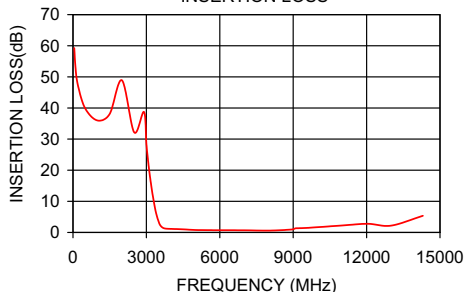
Electrical Schematic



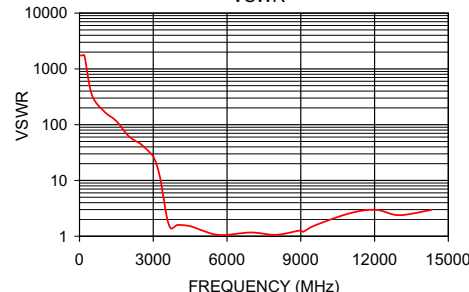
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	59.26	1737.18
400	41.60	434.30
1500	38.09	115.81
2800	35.62	34.75
2900	38.74	30.49
3050	24.44	24.14
3250	12.48	12.61
3400	6.15	5.42
3500	3.42	2.92
3650	1.63	1.53
3900	1.17	1.51
4000	1.14	1.59
6000	0.71	1.06
8800	0.74	1.23
9500	1.36	1.48
9800	1.41	1.87
14000	2.60	1.49

HFCN-3500+ INSERTION LOSS



HFCN-3500+ VSWR



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P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

IF/RF MICROWAVE COMPONENTS

REV. A
M121640
EDR-8120/2
HFCN-3500+
RAV
090223
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