

High Pass Filter

50Ω 6000 to 11500 MHz

HFCN-5500+ HFCN-5500



Maximum Ratings

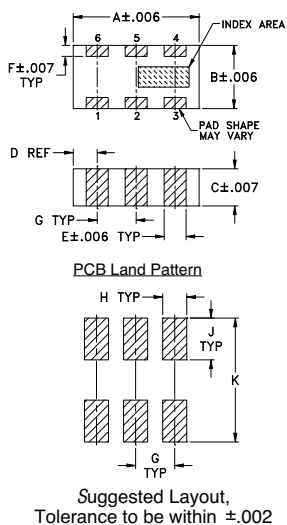
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	7W max. at 25°C

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

Pin Connections

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

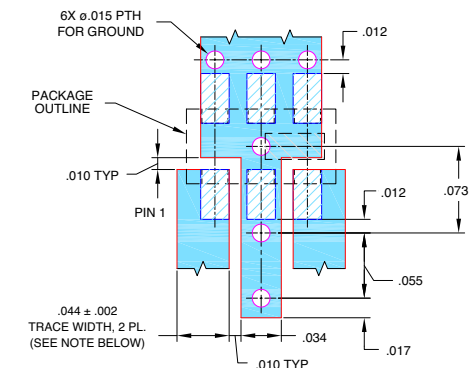
Outline Drawing



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.
- Hermetically sealed
- Patent pending

Application

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

CASE STYLE: FV1206-1

Model	Price	Qty.
HFCN-5500+	\$2.99	(10-49)
HFCN-5500	\$2.99	(10-49)
HFCN-5500D+	\$3.49	(10-49)
HFCN-5500D	\$3.49	(10-49)

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

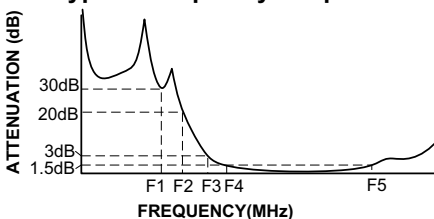
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

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

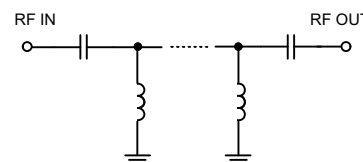
STOPBAND (MHz)		fco, MHz	PASSBAND (MHz)		VSWR	POWER	NO. OF
(Loss>30dB) (Loss>20dB)		Nom.	(Loss<1.5dB) (Loss<2dB)		Typ.	INPUT	SECTIONS
Typ.	Min.	Typ.	Max.	Max.	Stopband Frequency	(W)	
DC-F1	DC-F2	F3	F4-F5		(MHz)	Max.	
DC-4000	DC-4500	5500	6600-10000	6000-11500	20:1	5600-11000	7
					1.5:1		5

1. For Applications requiring DC voltage to be applied to the input or output, use HFCN-5500D (DC Resistance to ground is 100 Mohms min.)

Typical Frequency Response



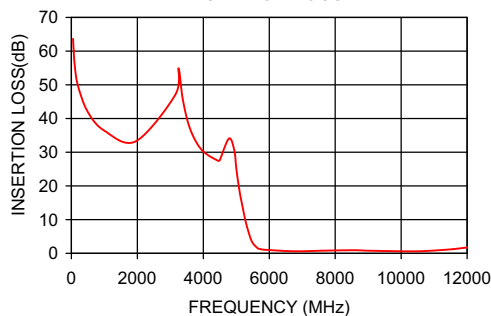
Electrical Schematic



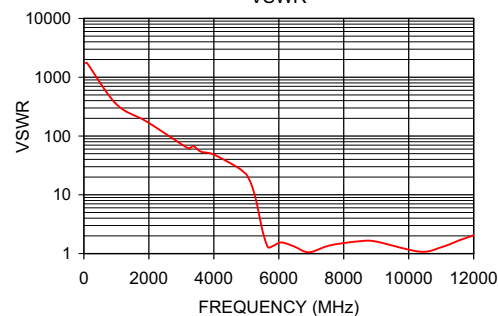
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	63.32	1737.18
500	41.73	868.59
1000	36.12	434.30
3250	44.07	62.05
4000	32.16	45.72
4500	27.90	34.75
5000	26.03	22.29
5500	3.24	2.44
5600	2.05	1.53
6000	1.39	1.53
6600	1.05	1.22
9000	1.09	1.60
10000	0.79	1.24
11500	1.18	1.64
12000	1.71	2.05

HFCN-5500 INSERTION LOSS



HFCN-5500 VSWR



REV. D
M121640
EDR-6982/3
HFCN-5500
RAV
090223
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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



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