

# Ceramic High Pass Filter

**NEW!**  
**HFCN-1760**

2100 to 5500 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

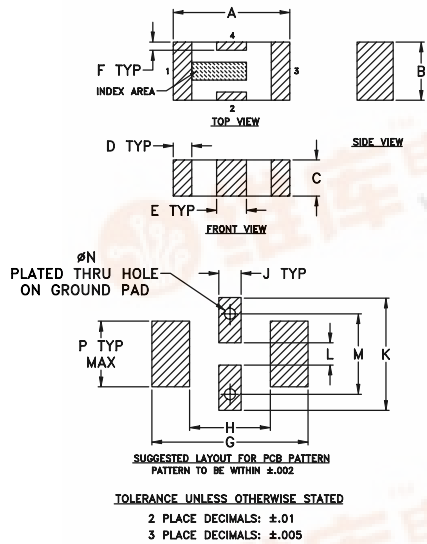
\*Passband rating, derate linearly to 3W at 100°C ambient.

## Pin Connections

RF IN	1**
RF OUT	3**
GROUND	2,4

\*\*RF IN & RF OUT can be interchanged

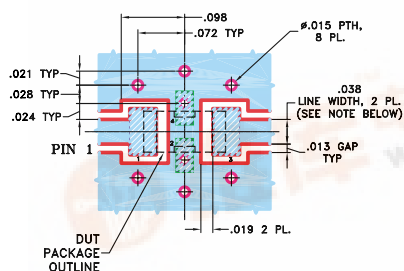
## Outline Drawing



## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	
.126	.063	.037	.020	.032	.009	.169	
3.20	1.60	0.94	0.51	0.81	0.23	4.29	
H	J	K	L	M	N	P	wt
.087	.024	.122	.024	.087	.012	.071	grams
2.21	0.61	3.10	0.61	2.21	0.30	1.80	.020

## Demo Board MCL P/N: TB-270 Suggested PCB Layout (PL-137)



**NOTE:** 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350 WITH DIELECTRIC THICKNESS .020" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED. 2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

① DENOTES PCB COPPER LAYOUT  
② DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

## Features

- low cost
- small size
- 7 sections
- temperature stable
- dc block in/out, breakdown voltage, 1kV typ.
- excellent power handling, 7W

## Applications

- sub-harmonic rejection and dc blocking
- transmitters/receivers
- lab use



**BLUE CELL™**

CASE STYLE: FV1206

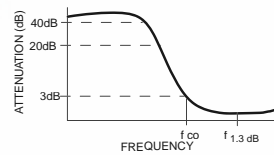
Model	Price	Qty.
HFCN-1760	\$1.99	(10-49)
HFCN-1760D	\$2.49	(10-49)

## High Pass Filter Electrical Specifications<sup>1</sup> (T<sub>AMB</sub>=25°C)

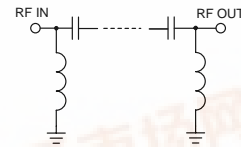
MODEL NO.	STOP BAND (MHz)		f <sub>co</sub> , MHz Nom. Typ.	PASSBAND (MHz)		VSWR Typ. Frequency (MHz) 1.5:1	POWER INPUT (W)	NO. OF SECTIONS
	(loss>40 dB)	(loss>20 dB)		(loss<1.3 dB) Max.	(loss<2 dB) Typ.			
HFCN-1760	950	1230	1760	2100-5200	1900-5500	20:1	2200-4500	7

1. For Applications requiring DC voltage to be applied to the Input or output, use HFCN-1760D (DC Resistance to ground is 100 Mohms min.)

## typical frequency response

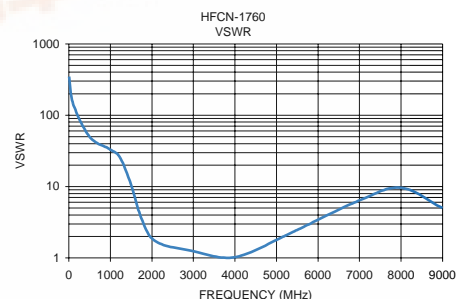
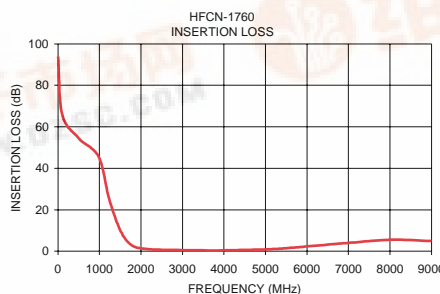


## schematic



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.00	94.01	347.44
100.00	65.92	144.77
500.00	54.47	49.64
980.00	45.56	33.42
1230.00	25.54	25.56
1500.00	10.05	10.43
1760.00	3.16	3.42
2100.00	1.10	1.69
3000.00	0.54	1.24
4000.00	0.44	1.02
5200.00	1.04	2.04
5480.00	1.40	2.43
7000.00	3.99	6.42
8000.00	5.48	9.63
9000.00	4.94	4.99



## designers kit available

Kit No.	No. of Units in Kit	Description	Price \$ per Kit
K1-HFCN	40	5 of each: HFCN-650,-740,-1200,-1500,-1760,-2000,-2275,-2700	79.95