

# Ceramic High Pass Filter

**NEW!**  
**HFCN-1600**

1950 to 5000 MHz

## Maximum Ratings

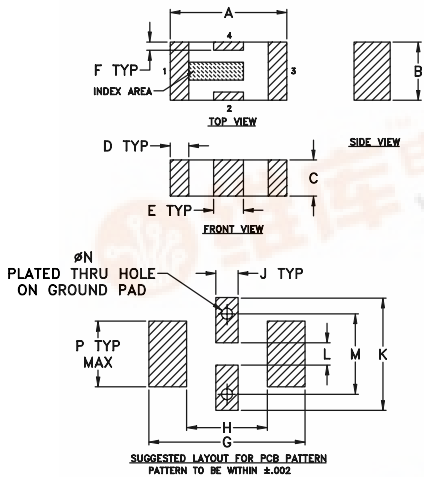
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	7W max. at 25°C

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

## Pin Connections

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

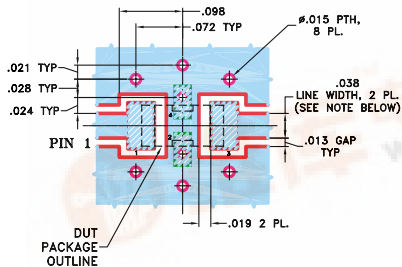
\*\* RF IN & RF OUT can be interchanged



## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	wt
.126	.063	.037	.020	.032	.009	.169	.087	.024	.122	.024	.087	.012	.071	grams
3.20	1.60	0.94	0.51	0.81	0.23	4.29	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
- excellent power handling, 7W

## Applications

- sub-harmonic rejection
- transmitters/receivers
- lab use



**BLUE CELL™**

CASE STYLE: FV1206

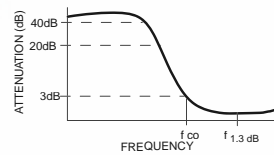
Model	Price	Qty.
HFCN-1600	\$1.99	(10-49)
HFCN-1600D	\$2.49	(10-49)

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

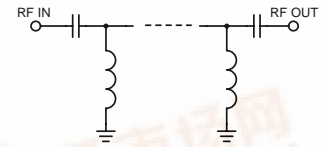
MODEL NO.	STOP BAND (MHz)		f <sub>co</sub> , MHz Nom. (loss > 3 dB) Typ.	PASSBAND (MHz)		VSWR Typ. Frequency (MHz) 1.5:1	POWER INPUT (W)	NO. OF SECTIONS
	(loss > 40 dB)	(loss > 20 dB)		(loss < 1.3 dB) Max.	(loss < 2 dB) Typ.			
HFCN-1600	1090	1290	1600	1950-4000	1650-5000	20:1	1700-4000	7

1. For Applications requiring DC voltage to be applied to the Input or output, use HFCN-1600D (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	82.28	>20
500.00	59.56	>20
1090.00	57.39	>20
1290.00	26.41	>20
1500.00	7.28	5.70
1600.00	2.52	1.95
1700.00	1.28	1.36
1960.00	0.80	1.36
3000.00	0.44	1.03
4000.00	0.70	1.63
4500.00	1.14	2.10
5000.00	1.70	2.61
6000.00	2.66	3.54
7000.00	3.49	4.55
8000.00	4.12	5.59

