

# Ceramic High Pass Filter

1340 to 4600 MHz

**NEW!**  
**HFCN-1200**



**BLUE CELL™**

CASE STYLE: FV1206

## Maximum Ratings

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

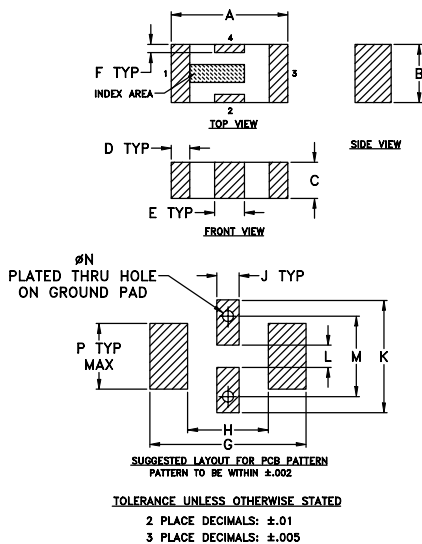
\*Passband rating, derate linearly to 3W at 100°C ambient.

## Pin Connections

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

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

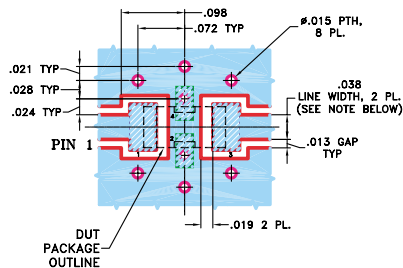
## Outline Drawing



## Outline Dimensions (inch)

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)



- 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.
- DENOTES PCB COPPER LAYOUT  
 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

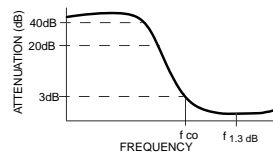
- sub-harmonic rejection and dc blocking
- transmitters/receivers
- lab use

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

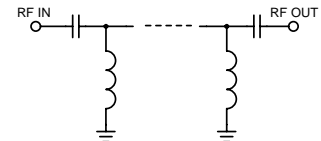
MODEL NO.	STOP BAND (MHz) Min.	f <sub>co</sub> , MHz Nom. (loss > 3 dB) Typ.	PASSBAND (MHz) Max.	VSWR Typ. Frequency (MHz) 1.5:1	POWER INPUT (W)	NO. OF SECTIONS
HFCN-1200	780 (loss > 40 dB)	940 (loss > 20 dB)	1180 (loss < 1.3 dB)	1340-4000 (loss < 2 dB) Typ.	20:1 1300-3200	7

1. For Applications requiring DC voltage to be applied to the Input or output, use HFCN-1200D (DC Resistance to ground is 100 Mohms min.)

## typical frequency response

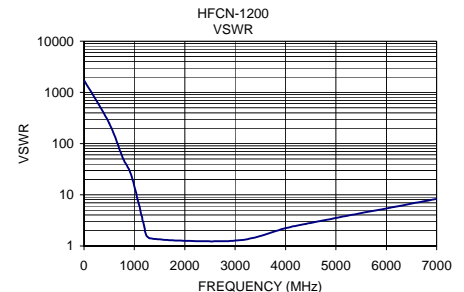
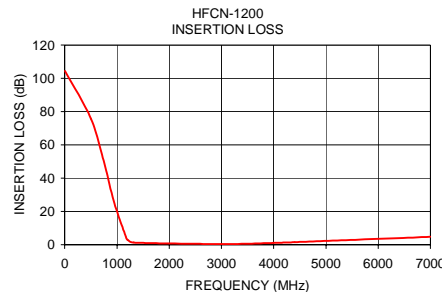


## schematic



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.00	104.60	1737.18
500.00	75.81	248.17
770.00	47.47	52.65
940.00	25.92	23.81
1180.00	3.74	2.80
1200.00	2.96	2.31
1320.00	1.24	1.40
3000.00	0.38	1.27
4000.00	1.06	2.22
4400.00	1.47	2.71
7000.00	4.70	8.31



## 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

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