

# Ceramic High Pass Filter

2410 to 6250 MHz

**NEW!**  
**HFCN-2000**



**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

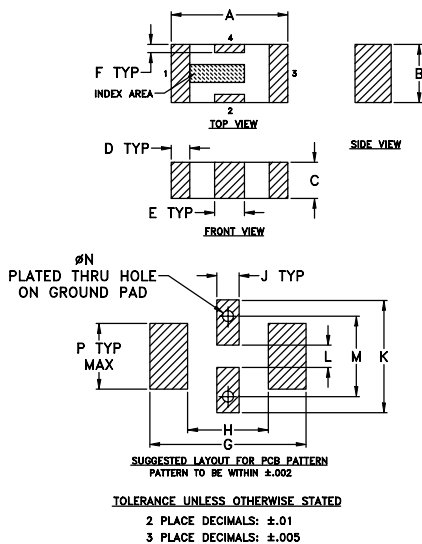
\*Passband rating, derate linearly to 3W at 100°C ambient.

## Pin Connections

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

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

## Outline Drawing



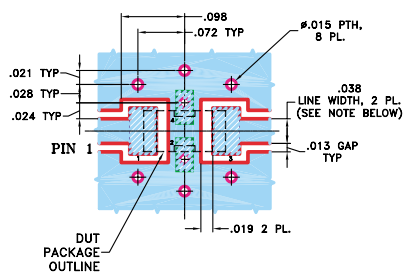
## Outline Dimensions (inch)

A	B	C	D	E	F	G
.126	.063	.037	.024	.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.

- 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

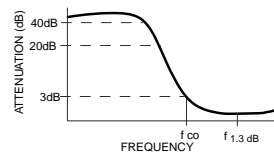
- sub-harmonic rejection and dc blocking
- transmitters/receivers
- lab use

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

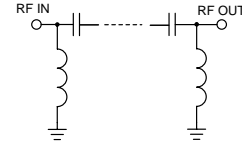
MODEL NO.	STOP BAND (MHz) Min. (loss>40 dB)	STOP BAND (MHz) Min. (loss>20 dB)	f <sub>co</sub> , MHz Nom. (loss 3 dB) Typ.	PASSBAND (MHz) Max. (loss<1.3 dB)	PASSBAND (MHz) Typ. (loss<2 dB)	VSWR Typ. Frequency (MHz) 1.5:1	POWER INPUT (W)	NO. OF SECTIONS
HFCN-2000	1300	1530	2000	2410-6000	2260-6250	20:1	2400-5600	7

1. For Applications requiring DC voltage to be applied to the Input or output, use HFCN-2000D (DC Resistance to ground is 100 Mohms min.)

## typical frequency response

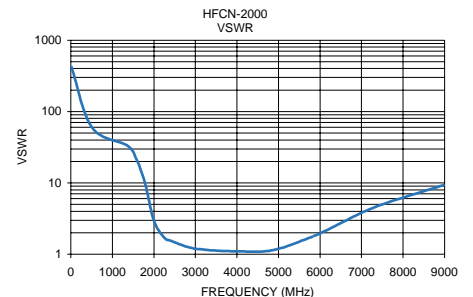
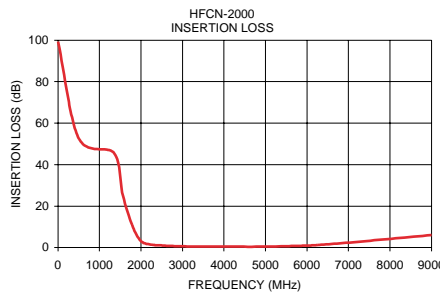


## schematic



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.00	99.34	434.30
504.00	52.51	59.91
1350.00	45.56	33.42
1560.00	25.41	22.87
1788.00	10.80	9.74
2000.00	3.14	2.94
2260.00	1.33	1.67
2410.00	1.10	1.54
3000.00	0.57	1.20
4060.00	0.48	1.10
4880.00	0.45	1.14
5830.00	0.85	1.78
6250.00	1.19	2.30
7350.00	2.99	4.64
9000.00	6.01	9.38



## 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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