

# Ceramic High Pass Filter

1400 to 4200 MHz

**NEW!**  
HFCN-12



**BLUE CELL™**

CASE STYLE: FV1206  
PRICE: \$1.99 ea. QTY (10-49)  
\$.99 ea. QTY (1000)

## Maximum Ratings

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

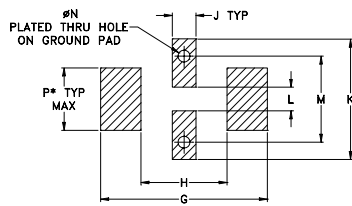
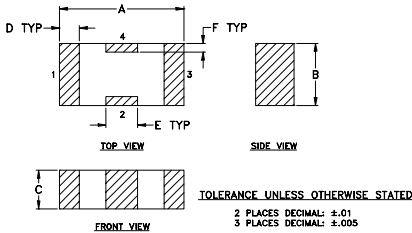
\*derate linearly to 3W at 100°C ambient.

## Pin Connections

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

\*\* pins 1&3 can be interchanged

## Outline Drawing

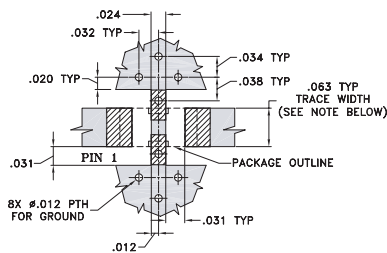


\* LINE WIDTH SHOULD BE DESIGNED TO MATCH 50 OHMS CHARACTERISTIC IMPEDANCE, DEPENDING ON PCB MATERIAL & THICKNESS.

## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
.126	.063	.039	.020	.032	.009	.169	.087
3.20	1.60	0.99	0.51	0.81	0.23	4.29	2.21
J	K	L	M	N	P	wt.	
.024	.122	.024	.087	.012	.071	grams	
0.61	3.10	0.61	2.21	0.30	1.80	.020	

## Demo Board MCL P/N: TB-237 Suggested PCB Layout (PL-123)



NOTE: TRACE WIDTH IS SHOWN FOR ROGERS R04350 WITH DIELECTRIC THICKNESS .030" ± .002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.

□ DENOTES PCB COPPER LAYOUT  
▨ DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

## 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

## Electrical Specifications (T<sub>AMB</sub>=25°C)

MODEL NO.	STOP BAND (MHz)		f <sub>co</sub> , MHz	PASSBAND (MHz)	VSWR		POWER INPUT (W)	NO. OF SECTIONS
	(loss >40 dB)	(loss >20 dB)	(loss 3 dB) Typ.	(loss < 1.3 dB)	Stopband Typ.	Frequency (MHz) 1.5:1		
HFCN-12	760	930	1180	1400-4200	20:1	1280-3000	7	7

## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
100.00	71.83	579.06
200.00	68.99	289.53
300.00	70.79	217.15
400.00	76.69	144.77
500.00	72.97	91.43
600.00	64.36	69.49
760.00	46.19	40.41
800.00	41.16	35.46
840.00	36.23	31.03
940.00	24.54	21.73
1000.00	17.90	15.81
1180.00	2.94	2.30
1260.00	1.40	1.31
1400.00	0.88	1.20
1500.00	0.73	1.17
2000.00	0.47	1.14
2500.00	0.44	1.06
3000.00	0.48	1.27
4000.00	1.00	1.96
5000.00	1.71	2.76

