

# Ceramic High Pass Filter

900 to 1900 MHz

**NEW!**  
**HFCN-7**



**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.

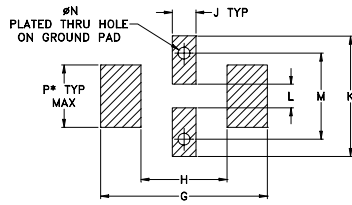
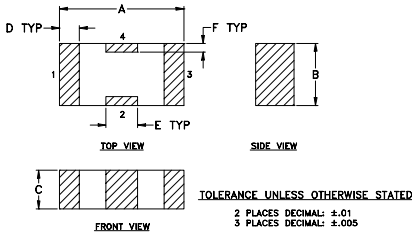
\*derate linearly to 3W at 100°C ambient.

## Pin Connections

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

\*\* pins 1&3 can be interchanged

## Outline Drawing

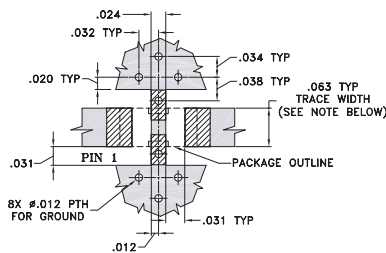


\* LINE WIDTH SHOULD BE DESIGNED TO MATCH 50 OHMS CHARACTERISTIC IMPEDANCE, DEPENDING ON PCB MATERIAL & THICKNESS.

## 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-7	420	530	700	900-1900	20:1	780-1700	7	7

## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
100.00	63.20	434.30
160.00	59.89	289.53
260.00	58.08	133.63
360.00	66.59	66.82
420.00	46.75	46.96
460.00	38.31	36.97
500.00	31.07	28.49
520.00	27.68	24.83
540.00	24.40	22.00
600.00	15.03	12.52
700.00	3.68	2.74
900.00	0.91	1.26
1100.00	0.71	1.31
1300.00	0.56	1.18
1800.00	0.55	1.37
2000.00	0.74	1.68
2500.00	1.64	2.68
3000.00	2.76	4.10
4000.00	4.98	7.31
5000.00	12.74	3.45

