

# Ceramic High Pass Filter

# HFCN-1200+ HFCN-1200

50Ω 1220 to 4600 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

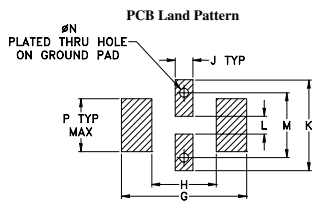
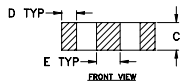
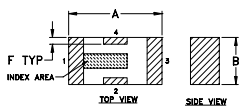
\* Passband rating, derate linearly to 3W at 100°C ambient.

## Pin Connections

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

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

## Outline Drawing

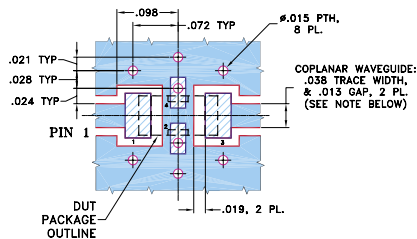


Suggested Layout, Tolerance to be within ±.002

## 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)



NOTES: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH THICKNESS .020" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.

2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
- 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
- hermetically sealed

## Applications

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

CASE STYLE: FV1206

Model	Price	Qty.
HFCN-1200+	\$1.99	(10-49)
HFCN-1200	\$1.99	(10-49)
HFCN-1200D+	\$2.49	(10-49)
HFCN-1200D	\$2.49	(10-49)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

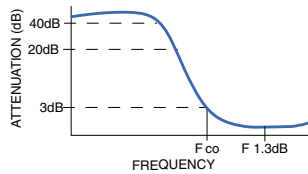
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

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

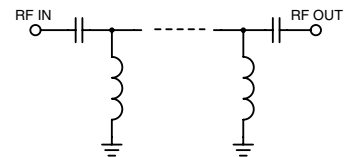
STOP BAND (MHz) Min.		f <sub>co</sub> , MHz Nom.	PASSBAND (MHz)		VSWR (:1) Typ.	POWER INPUT (W)	NO. OF SECTIONS
(loss > 40 dB)	(loss > 20 dB)	(loss 3 dB) Typ.	(loss < 1.3 dB) Max.	(loss < 2 dB) Typ.	Frequency (MHz) Stopband 1.5:1		
780	940	1180	1380-4000	1220-4600	20:1	1300-3200	7

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

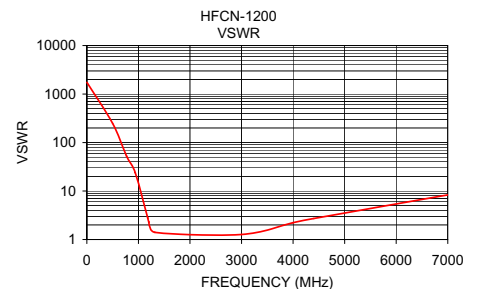
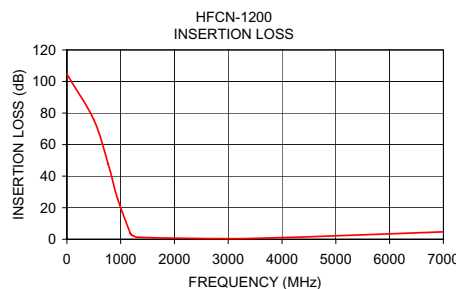


## electrical schematic



## 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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