

Ceramic High Pass Filter

1510 to 5000 MHz

NEW!
HFCN-1300



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

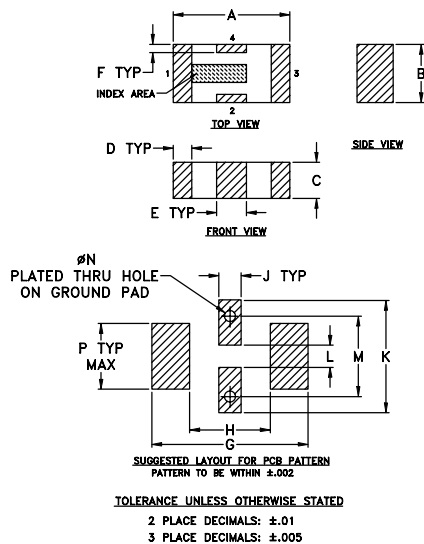
*Passband rating, derate linearly to 3W at 100°C ambient.

Pin Connections

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

** RF IN & RF OUT can be interchanged

Outline Drawing

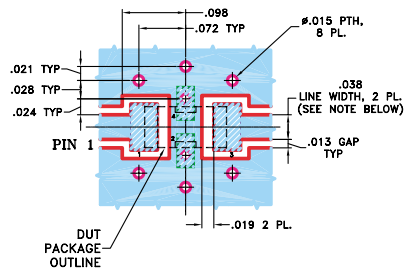


Outline Dimensions (inch)

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
- excellent power handling, 7W

Applications

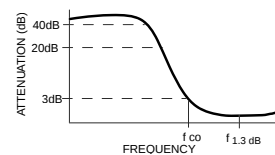
- sub-harmonic rejection
- transmitters/receivers
- lab use

High Pass Filter Electrical Specifications¹ (T_{AMB}=25°C)

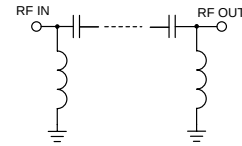
MODEL NO.	STOP BAND (MHz) Min.	f _{co} , MHz Nom. (loss 3 dB) Typ.	PASSBAND (MHz) (loss < 1.3 dB) Max. (loss < 2 dB) Typ.	VSWR Typ. Frequency (MHz) 1.5:1 Stopband	POWER INPUT (W)	NO. OF SECTIONS
HFCN-1300	680 930	1300	1510-4000 1400-5000	20:1 1400-4000	7	7

1. For Applications requiring DC voltage to be applied to the Input or output, use HFCN-1300D (DC Resistance to ground is 100 Mohms min.)

typical frequency response

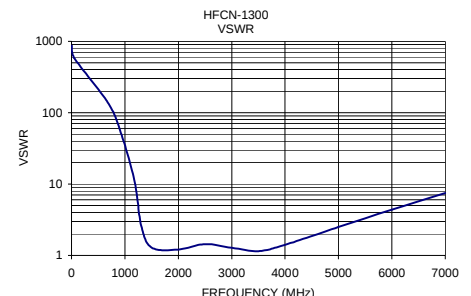
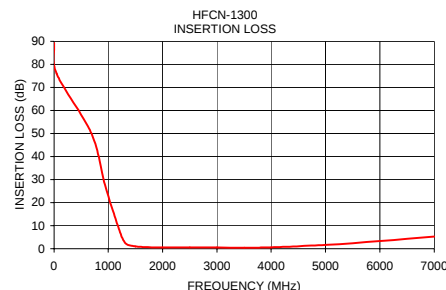


schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.00	89.20	>20
50.00	75.85	>20
690.00	49.92	>20
938.00	27.78	>20
1184.00	9.38	10.43
1305.00	2.72	2.59
1500.00	1.02	1.29
2000.00	0.58	1.21
2500.00	0.61	1.44
3000.00	0.52	1.28
3500.00	0.48	1.15
4000.00	0.64	1.41
5000.00	1.67	2.50
6000.00	3.37	4.38
7000.00	5.35	7.47



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