

Ceramic High Pass Filter

NEW!
HFCN-1810

2250 to 4750 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

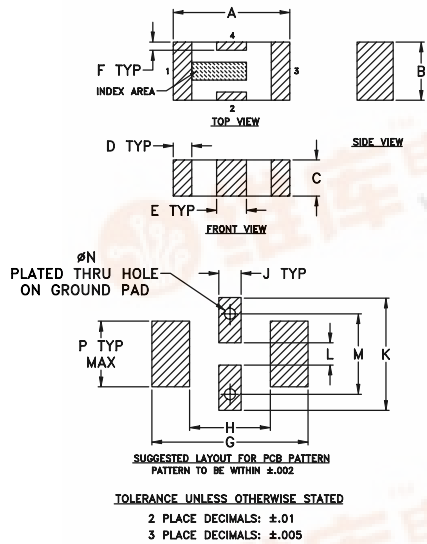
*Passband rating, derate linearly to 3W at 100°C ambient.

Pin Connections

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

** RF IN & RF OUT can be interchanged

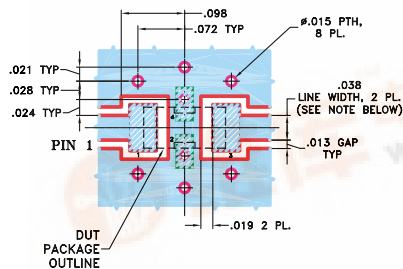
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	
.126	.063	.037	.020	.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.

① DENOTES PCB COPPER LAYOUT
 ② 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



BLUE CELL™

CASE STYLE: FV1206

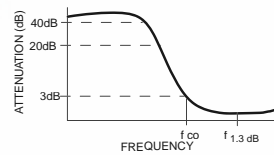
Model	Price	Qty.
HFCN-1810	\$1.99	(10-49)
HFCN-1810D	\$2.49	(10-49)

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

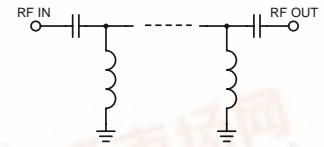
MODEL NO.	STOP BAND (MHz)		f _{co} , MHz Nom. Typ.	PASSBAND (MHz)		VSWR Typ. Frequency (MHz) 1.5:1	POWER INPUT (W)	NO. OF SECTIONS
	(loss>40 dB)	(loss>20 dB)		(loss<1.3 dB) Max.	(loss<2 dB) Typ.			
HFCN-1810	1100	1480	1810	2250-3850	1950-4750	20:1	2250-3750	7

1. For Applications requiring DC voltage to be applied to the Input or output, use HFCN-1810D (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	94.72	>20
250.00	69.71	>20
1000.00	48.11	>20
1320.00	55.76	>20
1490.00	26.94	>20
1643.00	11.73	8.81
1780.00	3.10	2.15
2250.00	0.83	1.53
2750.00	0.52	1.19
3046.00	0.50	1.10
3750.00	0.64	1.49
4048.00	0.84	1.81
4750.00	1.73	2.73
5750.00	3.22	4.18
7000.00	4.60	6.05

