

High Pass Filter

NEW!
HFCN-3800

50Ω, 4250 to 10000 MHz

Maximum Ratings

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

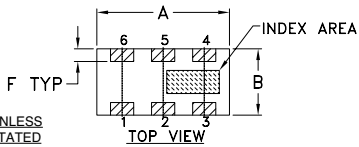
*derate linearly to 3W at 100°C ambient

Pin Connections

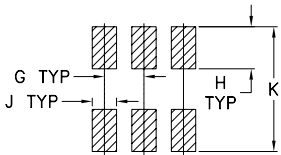
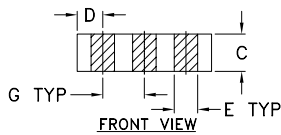
RF IN	1**
RF OUT	3**
GROUND	2,4,5,6

**RF IN & RF OUT can be interchanged

Outline Drawing



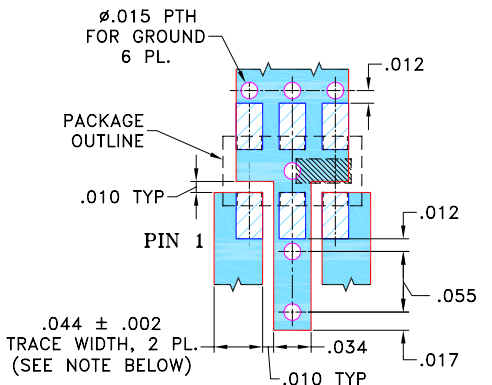
TOLERANCE UNLESS OTHERWISE STATED
2 PLACES DECIMAL: ±.01
3 PLACES DECIMAL: ±.005



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	wt.
.126	.063	.035	.024	.022	.012	.039	.042	.024	.123	grams
3.20	1.60	0.89	0.61	0.56	0.30	0.99	1.07	0.61	3.12	.02

Demo Board MCL P/N: TB-285
Suggested PCB Layout(PL-158)



- 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.
- 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
- 5 sections
- Temperature stable
- Good power handling
- DC block in/out, breakdown voltage, 1kV typ.

Application

- Sub-harmonic rejection and DC blocking
- Transmitters/Receivers



CASE STYLE: FV1206-1

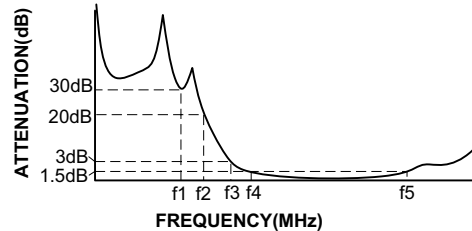
Model	Price	Qty.
HFCN-3800	\$2.49	(10-49)
HFCN-3800D	\$2.99	(10-49)

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

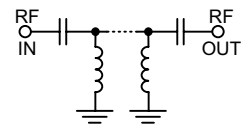
MODEL NO.	STOPBAND (MHz)		f _{co} , MHz	PASSBAND (MHz)		VSWR		POWER INPUT (W) Max.
	Typ. DC-f1	Min. DC-f2	Nom. (Loss 3dB) Typ. f3	Max. (Loss<1.5dB) f4-f5	Max. (Loss<2dB)	Typ. Stopband Frequency (MHz) 1.5:1		
HFCN-3800	DC-3100	DC-3200	3800	4500-9000	4250-10000	20:1	3950-10000	7

1. For Applications requiring DC voltage to be applied to the input or output, use HFCN-3800D (DC Resistance to ground is 100 Mohms min.)

Typical Frequency Response



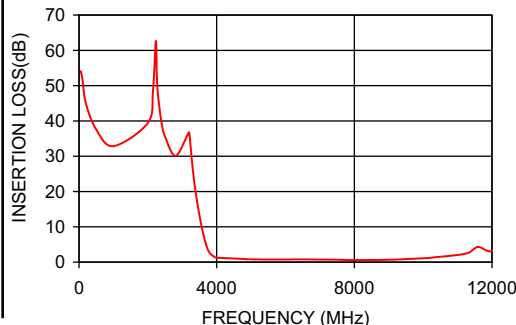
Schematic



Typical Performance Data at 25°C

FREQUENCY (MHz)	INSERTION LOSS (dB)	VSWR (:1)
50	54.14	1737.18
500	37.58	1737.18
1000	32.85	248.17
2000	39.46	78.97
2800	30.08	42.38
3280	28.81	23.81
3800	2.59	2.00
3950	1.41	1.16
4500	1.02	1.43
6000	0.76	1.18
8000	0.59	1.05
9900	1.05	1.65
10200	1.25	1.79
11330	2.71	1.96
12000	3.15	1.20

HFCN-3800
INSERTION LOSS



HFCN-3800
VSWR

