

Ceramic High Pass Filter

2100 to 5500 MHz

NEW!
HFCN-1760



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

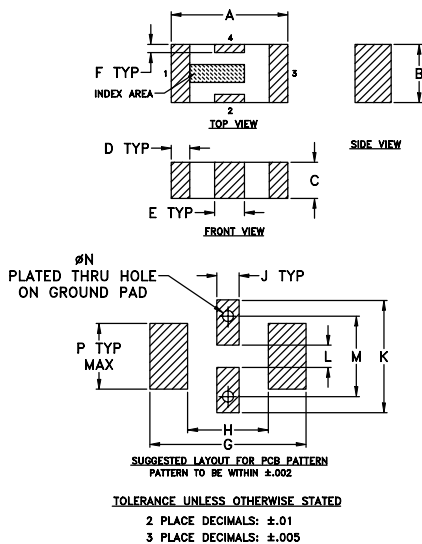
*Passband rating, derate linearly to 3W at 100°C ambient.

Pin Connections

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

**RF IN & RF OUT can be interchanged

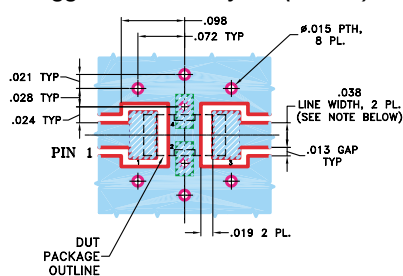
Outline Drawing



Outline Dimensions (inch)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	wt
.126	.063	.037	.024	.087	.012	.071	.087	.024	.024	.087	.012	.071	1.80	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)



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
- dc block in/out, breakdown voltage, 1kV typ.
- excellent power handling, 7W

Applications

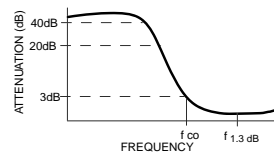
- sub-harmonic rejection and dc blocking
- transmitters/receivers
- lab use

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

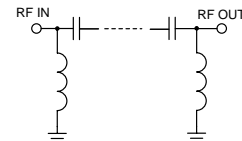
MODEL NO.	STOP BAND (MHz) Min.	f _{co} , MHz Nom. (loss > 3 dB) Typ.	PASSBAND (MHz) Max. (loss < 2 dB) Typ.	VSWR Typ. Frequency (MHz) 1.5:1	POWER INPUT (W)	NO. OF SECTIONS
HFCN-1760	950 (loss > 40 dB)	1230 (loss > 20 dB)	1760	2100-5200 1900-5500	20:1 2200-4500	7

1. For Applications requiring DC voltage to be applied to the Input or output, use HFCN-1760D (DC Resistance to ground is 100 Mohms min.)

typical frequency response

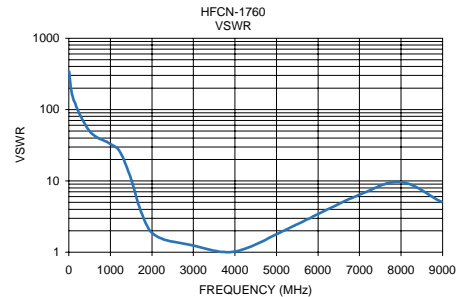
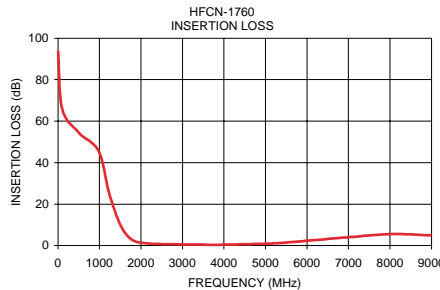


schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.00	94.01	347.44
100.00	65.92	144.77
500.00	54.47	49.64
980.00	45.56	33.42
1230.00	25.54	25.56
1500.00	10.05	10.43
1760.00	3.16	3.42
2100.00	1.10	1.69
3000.00	0.54	1.24
4000.00	0.44	1.02
5200.00	1.04	2.04
5480.00	1.40	2.43
7000.00	3.99	6.42
8000.00	5.48	9.63
9000.00	4.94	4.99



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

Mini-Circuits®

Distribution Centers NORTH AMERICA 800-654-7949 • 417-335-5935 • Fax 417-335-5945 • EUROPE 44-1252-832600 • Fax 44-1252-837010

Mini-Circuits ISO 9001 & ISO 14001 Certified

INTERNET <http://www.minicircuits.com>

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

REV. C
M96263
EDR-6465/1
HFCN-1760
AD/RS/CP
050113