Ceramic

High Pass Filter

HFCN-1910

Generic photo used for illustration purposes only

CASE STYLE: FV1206

50Ω

2000 to 5200 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. Permanent damage may occur if any of these limits are exceeded.

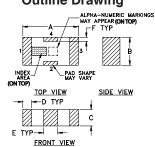
- low cost
- small size

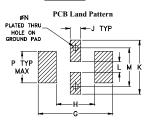
Available Tape and Reel at no extra cost Devices/Reel Reel Size 20, 50, 100, 200, 500, 1000, 3000

Pin Connections

RF IN	1_
RF OUT	3
GROUND	2,4

Outline Drawing





Suggested Layout Tolerance to be within ±.002

.169

4.29

.071 grams

0.23

Outline Dimensions (inch)

.020 .032 .009

Features

- 7 sections
- temperature stable
- hermetically sealed
- LTCC construction
- · excellent power handling, 7W

Applications

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

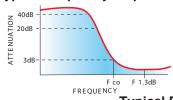
Electrical Specifications(1,2) at 25°C

STOP (MI	Hz)	fco, MHz Nom.	PASSBAND (MHz)		VSWR (:1) Typ.		POWER INPUT (W)	NO. OF SECTIONS
l lvii		(loss 3 dB)	(loss < 1.3 dB)	(loss < 2 dB)		Frequency (MHz)	((()	
(loss > 40 dB)	(loss > 20 dB)	Тур.	Max.	Typ.	Stopband	1.5:1		
1075	1400	1910	2200-4400	2000-5200	20:1	2100-4500	7	7

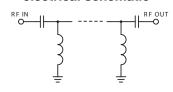
(1) In Application where DC voltage is present at either input or output ports, coupling capacitors are required. Alternatively, Mini-Circuits' "D" suffix version of this model will provide>100 MOhm isolation to ground.

(2) Measured on Mini-Circuits Characterization Test Board TB-270.

typical frequency response



electrical schematic

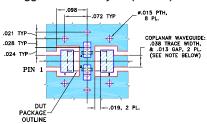


Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.00	90.73	1737.18
50.00	75.59	1737.18
500.00	63.78	248.17
1040.00	50.40	72.39
1400.00	25.38	34.75
1840.00	2.89	2.89
1910.00	1.73	1.90
2050.00	0.97	1.29
2100.00	0.87	1.23
2200.00	0.75	1.18
3500.00	0.48	1.11
4400.00	0.67	1.42
4500.00	0.76	1.51
5200.00	1.37	2.19
7000.00	4.34	5.44

0.61 Demo Board MCL P/N: TB-270 Suggested PCB Layout (PL-137)

2.21 0.30 1.80



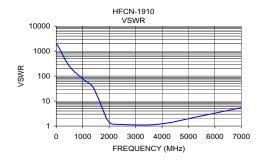
COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS ROA350B WITH THICKNESS .020" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED. NOTES: 1.

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

INSERTION LOSS 100 80 INSERTION LOSS 60 40 20 1000 FREQUENCY (MHz)

HFCN-1910



A .126

.087 .024

2.21 0.61

.063

1.60

.122 .024 .087 .012

3.10

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document. B. Electrical specifications and performance data contained in this specification document are based on Mini Claudia popularity and the state of the state
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. The parts covered by this specification document are subject to Mini-Circuit's standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp