High Pass Filter

50Ω 5000 to 11000 MHz

Maximum Ratings

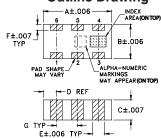
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	7W max. at 25°C
*Passband rating, derate linearly to 3	W at 100°C ambient.

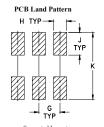
Permanent damage may occur if any of these limits are exceeded.

Pin Connections

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

Outline Drawing



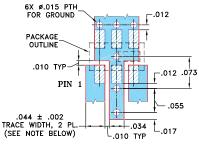


Suggested Layout, Tolerance to be within ±.002

Outline Dimensions (inch)

F	E	D	С	В	Α
.011	.022	.024	.035	.063	.126
0.28	0.56	0.61	0.89	1.60	3.20
wt		K	J	Н	G
grams		.123	.042	.024	.039
.020		3.12	1.07	0.61	0.99

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



NOTE: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350
WITH DIELECTRIC THICKNESS: .020 ± .0015;
COPPER: 1/2 0Z. 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
- 5 sections
- Temperature stable
- Excellent power handling, 7W
- · Hermetically sealed
- LTCC construction
- Protected by US Patent 7,760,485

Applications

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

HFCN-4600+



CASE STYLE: FV1206-1 PRICE: \$2.99 ea. QTY (20)

+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications



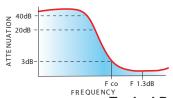
Electrical Specifications (1,2) at 25°C

Electrical opecinications						•		
STOPBAND fco, MHz PASSBAND (MHz) Nom. (MHz)			VSWR Typ.		POWER INPUT	NO. OF SECTIONS		
(Loss > 30dB) Typ.	(Loss > 20dB) Min.	(Loss 3 dB) Typ.	(Loss < 1.5dB) Max.	(Loss < 2dB) Max.	Stopband	Frequency (MHz) 1.5:1	(W) Max.	
3700	3800	4600	5200-10500	5000-11000	20:1	4720-11000	7	5

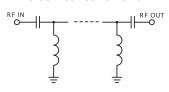
(1) In Application where DC voltage is present at either input or output ports, coupling capacitors are required.

(2) Measured on Mini-Circuits Characterization Test Board TB-285.

typical frequency response

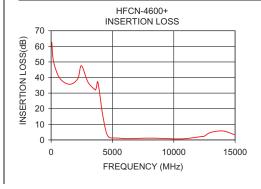


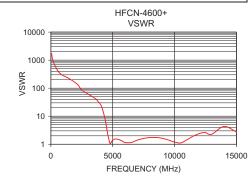
electrical schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	62.56	1737.18
1500	35.68	217.15
2470	47.59	86.86
3700	33.77	38.61
3800	37.24	34.07
4150	18.50	19.32
4380	8.52	7.90
4500	4.77	3.97
4600	2.78	2.25
4720	1.66	1.31
5000	1.27	1.39
5200	1.25	1.54
8000	1.11	1.73
10500	0.66	1.12
11000	0.85	1.45
14000	5.72	4.32
15000	3.27	2.75





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-Circuits tapplicable established test performance criteria and measurement instructions.

C. The parts covered by this specification document are subject to Mini-Circuits 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