

High Pass Filter

50Ω 5000 to 11000 MHz

Maximum Ratings

Operating Temperature -55°C to 100°C

Storage Temperature -55°C to 100°C

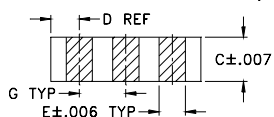
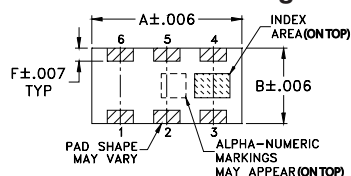
RF Power Input* 7W max. at 25°C

*Passband rating, derate linearly to 3W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.

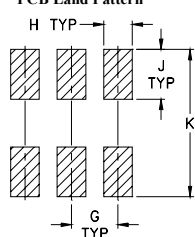
Pin Connections

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

Outline Drawing



PCB Land Pattern



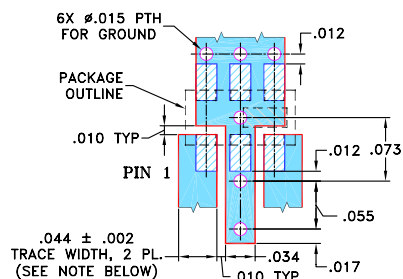
Suggested Layout,
Tolerance to be within ±.002

Outline Dimensions (inch)

A	B	C	D	E	F
.126	.063	.035	.024	.022	.011
3.20	1.60	0.89	0.61	0.56	0.28
G	H	J	K	wt	
.039	.024	.042	.123	grams	
0.99	0.61	1.07	3.12		.020

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 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

Notes

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-Circuit's applicable established test performance criteria and measurement instructions.

C. 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-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp

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
- Transmitters / receivers

HFCN-4600+



Generic photo used for illustration purposes only

CASE STYLE: FV1206-1

+RoHS Compliant

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

Available Tape and Reel at no extra cost

Reel Size 7" Devices/Reel 20, 50, 100, 200, 500, 1000, 3000

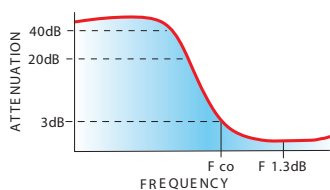
Electrical Specifications^(1,2) at 25°C

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

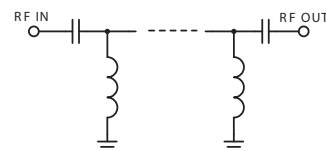
(1) In Application where DC voltage is present at either input or output ports, coupling capacitors are required.

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

typical frequency response

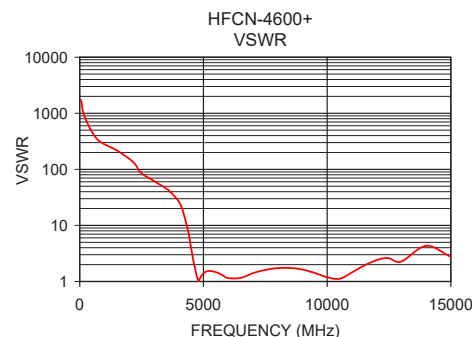
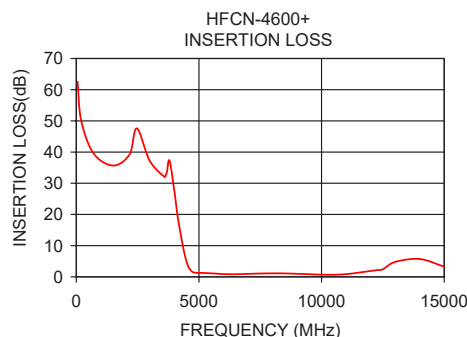


electrical schematic



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



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