

High Pass Filter

50Ω 4250 to 10000 MHz

HFCN-3800



CASE STYLE: FV1206-1

Available Tape and Reel at no extra cost

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

Maximum Ratings

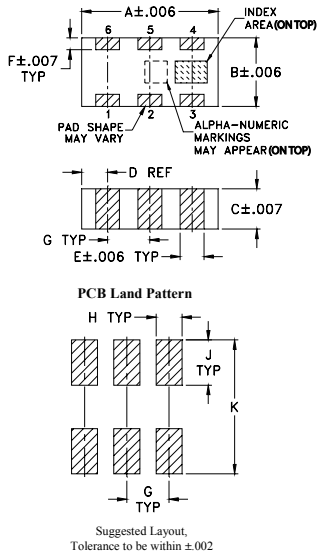
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	7W max. at 25°C

*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

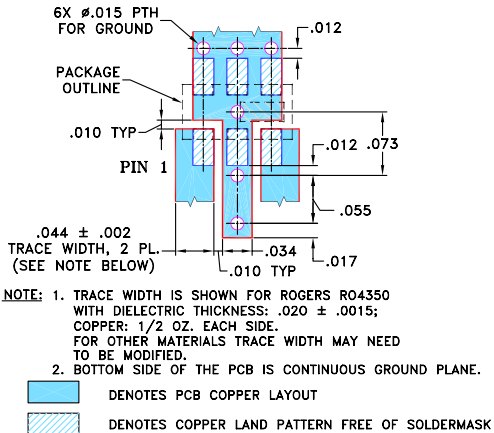
Outline Drawing



Outline Dimensions (inch)

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

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



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

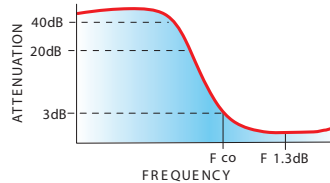
- Sub-harmonic rejection
- Transmitters / receivers

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

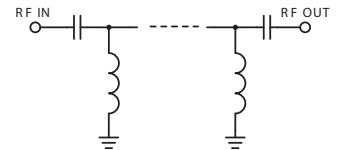
STOPBAND (MHz)	f _{co} , MHz Nom.	PASSBAND (MHz)	VSWR Typ.	POWER INPUT (W)	NO. OF SECTIONS
(Loss > 30dB) Typ.	(Loss > 20dB) Min.	(Loss < 1.5dB) Max.	Frequency (MHz) 1.5:1	Max.	
2500	3200	4500-9000	20:1	3950-10000	5

(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-285.

typical frequency response

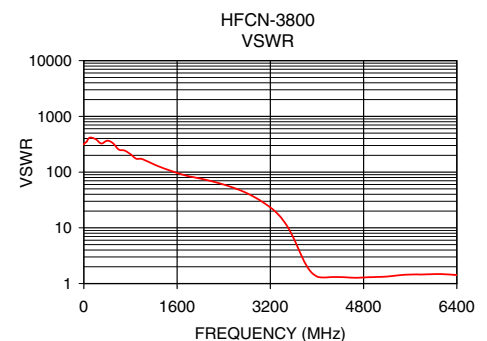
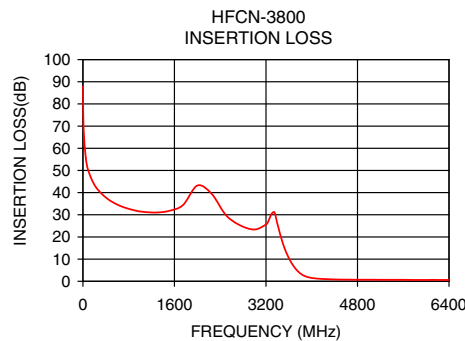


electrical schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50.00	55.55	352.78
500.00	36.00	329.74
1500.00	31.71	104.95
3200.00	25.64	23.24
3400.00	25.91	14.49
3500.00	16.74	10.30
3800.00	3.55	2.30
4000.00	1.50	1.34
4250.00	0.97	1.31
4500.00	0.78	1.29
5000.00	0.70	1.31
5500.00	0.66	1.44
6000.00	0.61	1.48
6400.00	0.59	1.42



Notes

- 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.
- 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-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

