# Ceramic High Pass Filter

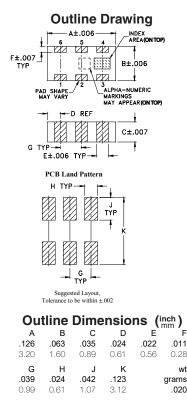
# 50Ω 7900 to 11000 MHz

# **Maximum Ratings**

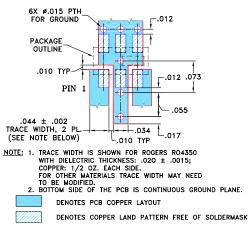
Operating Temperature	-55°C to 100°C							
Storage Temperature	-55°C to 100°C							
RF Power Input*	6W max. at 25°C							
*Passband rating, derate linearly to 3W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.								

# **Pin Connections**

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



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



#### **Features**

- Low cost
- Small size
- 5 sections
- Temperature stableExcellent power handling, 6W
- Excellent power handling, 6W
  Hermetically sealed
- LTCC construction
- Protected by US Patent 7,760,485

## Applications

- Sub-harmonic rejection
- Transmitters / receivers



HFCN-7150+

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

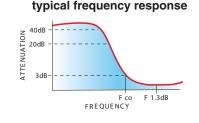


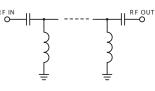
Electrical Specifications <sup>(1,2)</sup> at 25°C											
STOPBAND (MHz)		fco, MHz Nom.	PASSI (Mł		-	SWR ſyp.	POWER INPUT	NO. OF SECTIONS			
(Loss > 30dB)	(Loss > 20dB)	(Loss 3 dB)	(Loss < 1.5dB)	(Loss < 2dB)		Frequency (MHz)	(W)				
Тур.	Min.	Тур.	Тур.	Max.	Stopband	1.5:1	Max.				
5100	6150	7150	8500-10500	7900-11000	20:1	7250-11000	6	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.

## electrical schematic





		Freque (MHz				I	nsertion Los (dB)		VSWR (:1) 1737.18 217.15 86.86					
		5 100 280	0				59.58 35.04 28.81							
	4540 5100 6150 6650 7020 7150						38.96 29.87 23.72		37.77 32.18 23.81					
							18.85 4.74 2.97 2.31		15.26 3.34 2.01					
		725 790 850	0				2.31 1.46 1.24		1.56 1.23 1.14					
	10500 11000 12000 15000 18000						0.92 0.82 1.37 3.95 5.64			1.29 1.05 1.87 3.19 2.95				
60	0		HFCN-7150+ INSERTION LOSS				10000 -		HFCN-7150+ VSWR					
	0	Λ					1000 -							
50 50 40 30 20 10							100 -							
É 10	0 +		+				10 -							

1

0

3000

6000

9000

FREQUENCY (MHz)

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-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

6000

0

0

3000

REV. F M151107 EDR-7909/3 HFCN-7150+ RAV/CP/AM

12000 15000 18000

# 

FREQUENCY (MHz)

9000 12000 15000 18000