

High Pass Filter

50Ω 5500 to 10000 MHz

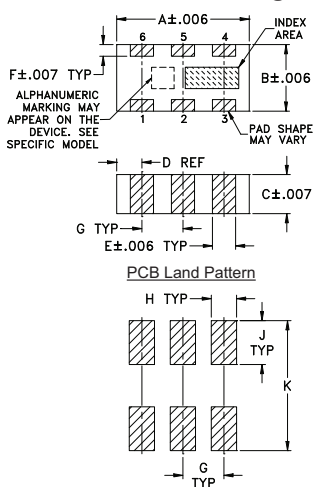
Maximum Ratings

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



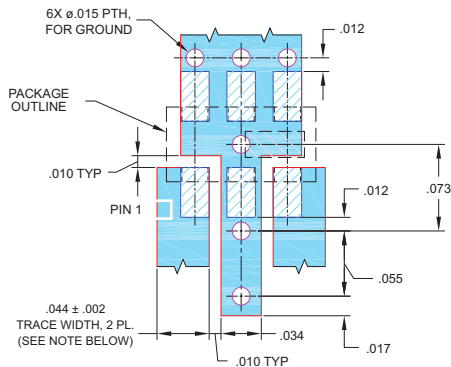
Suggested Layout,
Tolerance to be within ±.002

Outline Dimensions (inch/mm)

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)



NOTES:

- TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .020" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
- 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

Features

- Low cost
- Small size
- 5 sections
- Temperature stable
- Excellent power handling, 7W
- Hermetically sealed
- LTCC construction
- Patent pending

Applications

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

HFCN-5050+



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

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

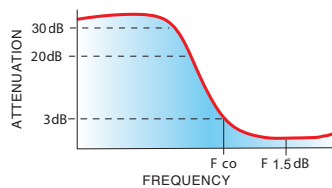
The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Electrical Specifications¹ at 25°C

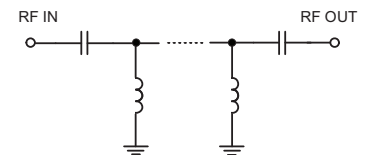
STOPBAND (MHz)		f _{co} , MHz Nom.	PASSBAND (MHz)		VSWR Typ.	POWER INPUT (W)	NO. OF SECTIONS
(Loss > 30dB) Typ.	(Loss > 20dB) Min.	(Loss 3 dB) Typ.	(Loss < 1.5dB) Max.	(Loss < 2dB) Max.	Frequency (MHz) 1.5:1	Max.	
3600	4200	5050	5650-9700	5500-10000	20:1	5200-10000	7

1. Coupling capacitors at input and output are recommended for use in applications requiring DC isolation of input and output ports to ground. As an alternative to using coupling capacitors, you may use the "D" version of this model.

typical frequency response



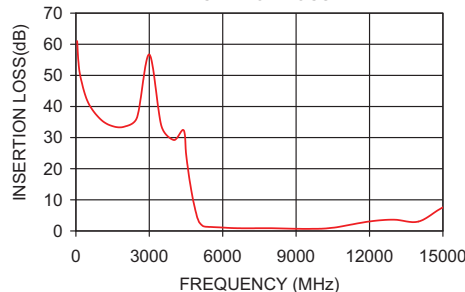
electrical schematic



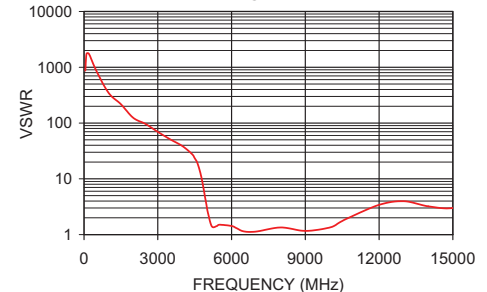
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	61.01	868.59
1000	35.93	347.44
3600	32.03	48.26
4200	31.40	32.79
4700	13.75	14.38
4800	9.47	9.38
4950	4.60	4.01
5050	2.70	2.35
5200	1.55	1.40
5500	1.29	1.51
5650	1.27	1.55
9700	0.65	1.16
10000	0.72	1.34
10700	1.24	1.94
12000	3.06	3.42
14000	3.02	3.21
15000	7.56	3.00

HFCN-5050+ INSERTION LOSS



HFCN-5050+ VSWR



Mini-Circuits®

ISO 9001 ISO 14001 AS 9100 CERTIFIED



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IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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.

REV. D
M126512
EDR-8120/4
HFCN-5050+
RAV
100920
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