Ceramic

High Pass Filter

HFCN-7150D+

50Ω 7900 to 11000 MHz

CASE STYLE: FV1206-1
PRICE: Contact Sales Dept.

+ 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.

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	6W max. at 25°C
Max. DC Voltage at pins 1&3	25 VDC

*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

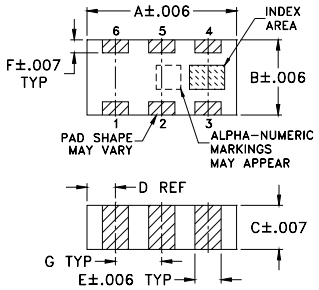
Features

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

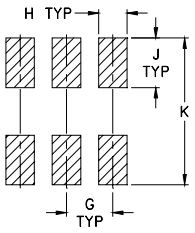
Applications

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

Outline Drawing



PCB Land Pattern



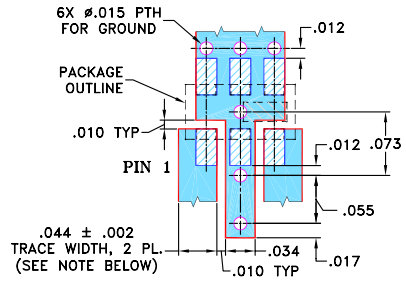
Suggested Layout,
Tolerance to be within ±.002

Outline Dimensions (inch / mm)

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

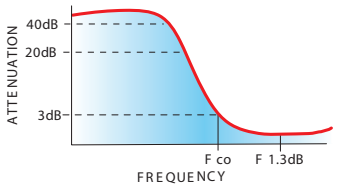
DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

Electrical Specifications[1] at 25°C

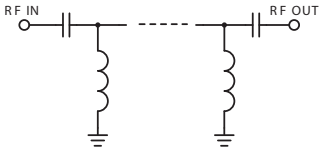
STOPBAND (MHz)		fco, MHz Nom.	PASSBAND (MHz)		VSWR Typ.		POWER INPUT (W)	NO. OF SECTIONS
(Loss > 30dB) Typ.	(Loss > 20dB) Min.	(Loss 3 dB) Typ.	(Loss < 1.5dB) Typ.	(Loss < 2dB) Max.	Stopband	Frequency (MHz) 1.5:1	Max.	
5100	6150	7150	8500-10500	7900-11000	20:1	7250-11000	6	5

1. DC Resistance to ground is 100 Mohms min.

typical frequency response



electrical schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	59.58	1737.18
1000	35.04	217.15
2800	28.81	86.86
4540	38.96	37.77
5100	29.87	32.18
6150	23.72	23.81
6650	18.85	15.26
7020	4.74	3.34
7150	2.97	2.01
7250	2.31	1.56
7900	1.46	1.23
8500	1.24	1.14
10500	0.92	1.29
11000	0.82	1.05
12000	1.37	1.87
15000	3.95	3.19
18000	5.64	2.95

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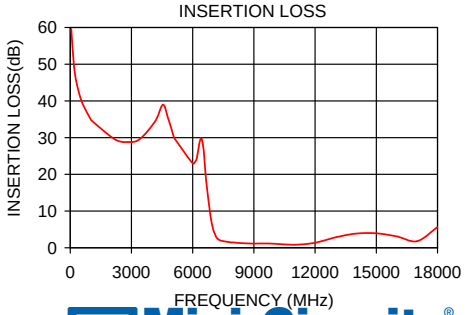
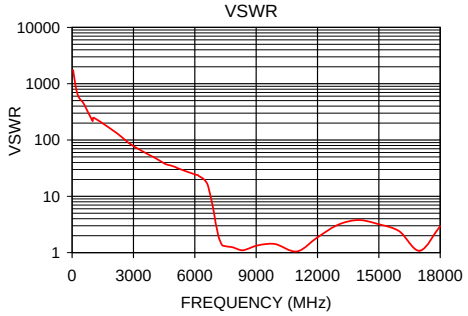
INSERTION LOSS



HFCN-7150D+
VSWR



For detailed performance specs & shopping online see web site

REV. B
M132298
EDR-7909/3
HFCN-7150D+
RAV/CP/AM
110708