

# Plug-In High Pass Filter

## PHP-100+

50Ω 90 to 400 MHz

### Maximum Ratings

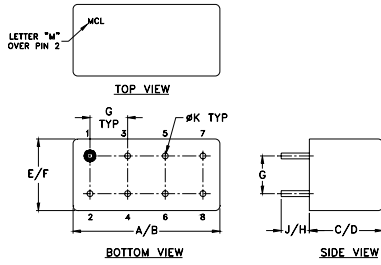
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

Permanent damage may occur if any of these limits are exceeded.

### Pin Connections

INPUT	1
OUTPUT	8
GROUND	2,3,4,5,6,7
CASE GROUND	2,3,4,5,6,7

### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031	grams	
5.08	5.08	3.56	0.79	5.2	

### Features

- Rugged shielded case, hermetically sealed
- other standard and custom PHP models available with wide selection of fco

### Applications

- lab use
- transmitters/receivers
- military/hi-rel application



Generic photo used for illustration purposes only

CASE STYLE: A01

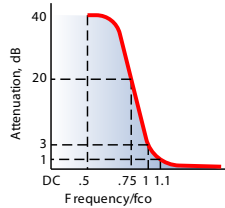
**+RoHS Compliant**

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

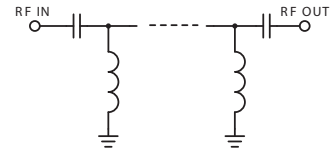
### High Pass Filter Electrical Specifications

STOPBAND (MHz)	fco (MHz) Nom.	PASSBAND (MHz)	VSWR (:1)
(loss > 40 dB)	(loss > 20 dB)	(loss < 3 dB)	Stopband Typ. Passband Typ.
DC-40	40-55	82	17 1.5

### typical frequency response

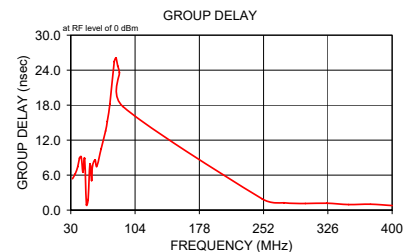
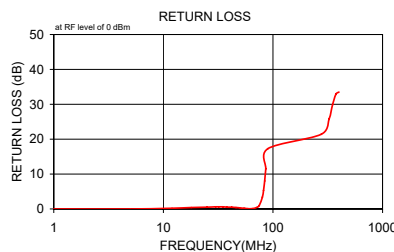


### electrical schematic



### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	$\sigma$		
1.00	66.80	1.3	32.00	5.38
5.00	69.56	0.5	35.00	6.18
12.00	76.93	5.0	38.00	7.45
18.00	72.01	4.0	40.00	8.91
25.00	74.64	7.6	42.00	9.15
30.00	70.54	2.0	44.00	6.49
32.00	70.63	3.7	46.00	8.82
35.00	70.04	3.6	48.00	0.92
38.00	63.40	2.1	50.00	1.83
40.00	59.85	0.7	52.00	7.91
42.00	55.56	0.6	54.00	5.06
46.00	49.83	0.5	55.00	7.57
50.00	43.77	0.6	58.00	8.59
52.00	40.75	0.6	60.00	7.49
54.00	37.94	0.5	65.00	10.52
55.00	36.57	0.6	70.00	13.56
58.00	32.40	0.6	72.00	15.21
65.00	22.98	0.7	75.00	18.22
72.00	13.63	0.6	80.00	25.45
75.00	9.75	0.5	82.00	26.11
80.00	4.23	0.1	84.00	24.72
82.00	2.74	0.1	86.00	23.58
84.00	1.74	0.1	90.00	17.77
86.00	1.16	0.1	250.50	1.92
90.00	0.72	0.1	275.50	1.26
275.50	0.23	0.1	300.00	1.14
325.00	0.21	0.1	325.00	1.18
350.00	0.21	0.1	350.00	0.95
375.00	0.21	0.1	375.00	1.01
400.00	0.21	0.1	400.00	0.78



#### 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-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](http://www.minicircuits.com/MCLStore/terms.jsp)

