

# Plug-In High Pass Filter

## PHP-700+

50Ω 700 to 1800 MHz

### Maximum Ratings

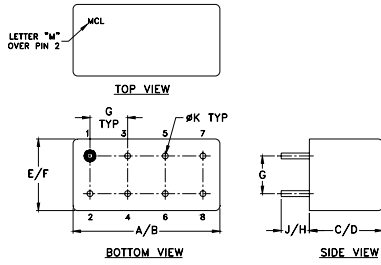
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

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

### Pin Connections

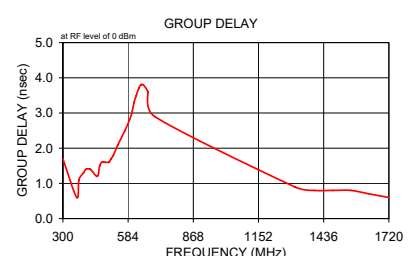
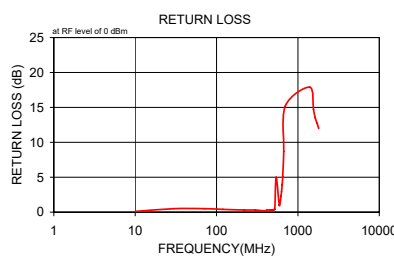
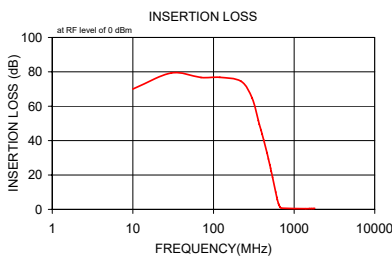
INPUT	1
OUTPUT	8
GROUND	2,3,4,5,6,7
CASE GROUND	2,3,4,5,6,7

### 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	



### 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)

### 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

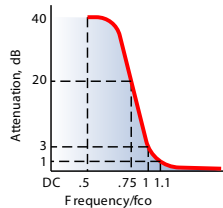
**+RoHS Compliant**

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

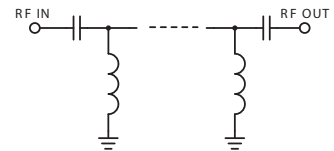
### High Pass Filter Electrical Specifications

STOPBAND (MHz)		fco (MHz) Nom.	PASSBAND (MHz)	VSWR (:1)	
(loss > 40 dB)	(loss > 20 dB)	(loss 3 dB)	(loss < 1 dB)	Stopband Typ.	Passband Typ.
DC-400	400-520	640	700-1800	17	1.6

### typical frequency response



### electrical schematic



### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	$\sigma$			
10.00	69.97	2.7	0.1	300.00	1.70
30.00	79.30	6.2	0.5	360.00	0.58
70.00	76.67	6.3	0.5	370.00	1.11
120.00	76.75	5.9	0.4	390.00	1.29
220.00	74.46	5.8	0.3	400.00	1.39
300.00	64.87	2.8	0.3	420.00	1.35
360.00	51.59	0.9	0.2	450.00	1.20
370.00	49.50	1.2	0.2	460.00	1.45
390.00	45.90	0.8	0.2	470.00	1.58
400.00	43.94	0.9	0.2	480.00	1.65
420.00	40.15	0.7	0.3	500.00	1.61
460.00	32.96	0.6	0.3	510.00	1.72
480.00	29.32	0.6	0.3	520.00	1.80
500.00	25.76	0.6	0.3	540.00	2.05
510.00	24.00	0.5	0.4	570.00	2.46
520.00	22.24	0.5	0.4	590.00	2.75
540.00	18.71	0.5	5.0	600.00	3.01
590.00	10.13	0.3	1.0	610.00	3.25
610.00	7.01	0.3	1.7	620.00	3.52
620.00	5.60	0.2	2.3	630.00	3.69
630.00	4.36	0.2	3.0	640.00	3.78
640.00	3.29	0.1	3.9	650.00	3.75
650.00	2.44	0.1	5.1	670.00	3.55
670.00	1.30	0.1	8.7	700.00	2.94
700.00	0.65	0.1	15.2	1310.00	0.89
1395.00	0.36	0.1	17.9	1395.00	0.85
1555.00	0.45	0.1	14.7	1475.00	0.76
1635.00	0.50	0.1	13.5	1555.00	0.78
1720.00	0.54	0.1	12.7	1635.00	0.75
1800.00	0.57	0.1	12.0	1720.00	0.65