

# Plug-In High Pass Filter

## PHP-500+

50Ω 500 to 1600 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

### 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

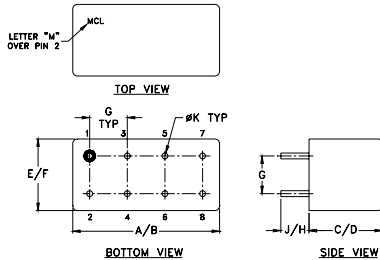
**+RoHS Compliant**

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-260	260-340	452	500-1600	17	1.5

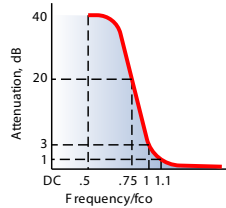
### Outline Drawing



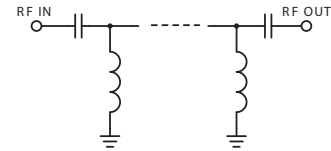
### Outline Dimensions (inch/mm)

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	

### typical frequency response

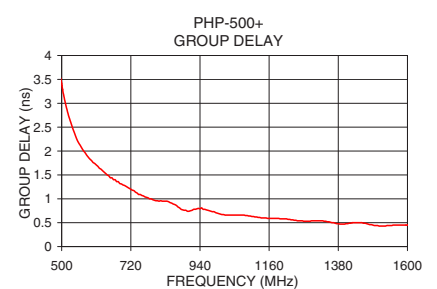
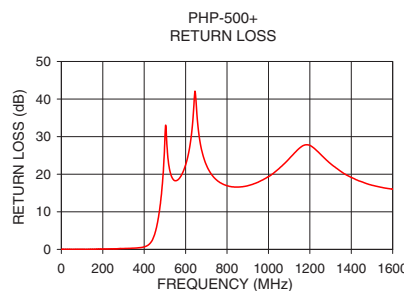
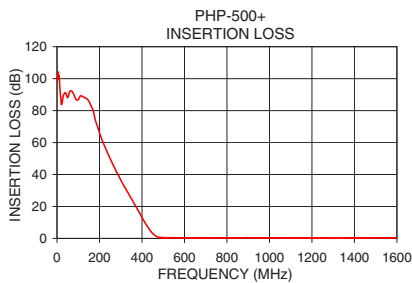


### electrical schematic



### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	$\sigma$		
1.00	98.82	4.65	500.00	3.42
100.00	86.86	3.68	550.00	2.22
180.00	74.31	1.24	600.00	1.76
210.00	62.41	0.88	650.00	1.48
260.00	47.15	0.45	700.00	1.28
340.00	27.20	0.37	750.00	1.09
395.00	14.36	0.38	800.00	0.96
425.00	7.57	0.36	900.00	0.74
440.00	4.73	0.31	1000.00	0.69
452.00	2.90	0.24	1100.00	0.64
465.00	1.49	0.15	1200.00	0.58
479.00	0.74	0.06	1300.00	0.54
500.00	0.46	0.02	1350.00	0.52
660.00	0.28	0.01	1400.00	0.47
760.00	0.35	0.02	1450.00	0.50
1000.00	0.37	0.02	1500.00	0.44
1500.00	0.40	0.02	1550.00	0.44
1600.00	0.37	0.02	1600.00	0.45



### 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.
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