

# Plug-In Low Pass Filter

## PLP-50+

50Ω DC to 48 MHz

### Maximum Ratings

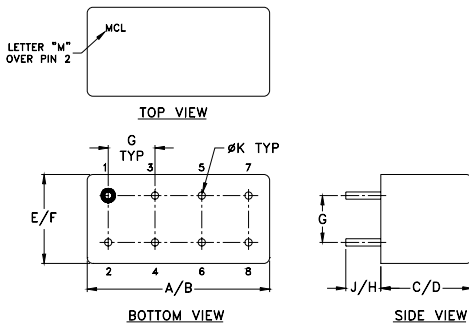
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

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)

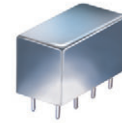
A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K	wt	
.200	.200	.140	.031	grams	
5.08	5.08	3.56	0.79	5.2	

### Features

- rugged welded case, hermetic
- other standard and custom PLP models available with wide selection of fco

### Applications

- test equipment
- lab use
- transmitters/receivers
- military/hi-rel applications



CASE STYLE: A01  
PRICE: \$13.70 ea. QTY (1-9)

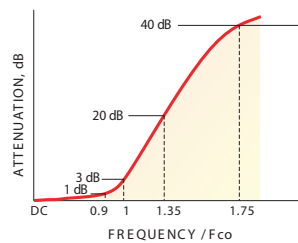
**+ RoHS compliant in accordance with EU Directive (2002/95/EC)**

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

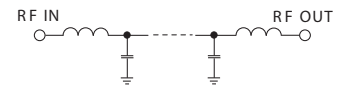
### Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco (MHz) Nom.	STOPBAND (MHz)		VSWR (:1)	
		(loss > 20 dB)	(loss > 40 dB)	Passband Typ.	Stopband Typ.
DC-48	55	70-90	90-200	1.7	18

### typical frequency response

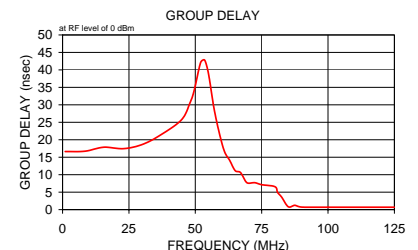
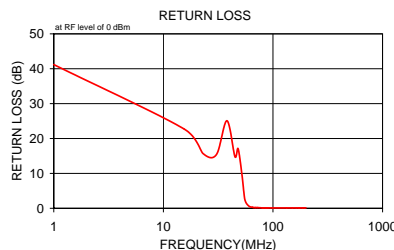


### electrical schematic



### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	$\sigma$			
1.00	0.05	0.0	41.2	1.00	16.62
15.50	0.23	0.1	22.7	8.50	16.73
23.00	0.37	0.1	15.7	15.50	17.87
30.50	0.43	0.1	15.4	23.00	17.45
38.00	0.40	0.1	25.1	30.50	18.79
45.00	0.65	0.1	14.8	38.00	21.89
48.00	0.70	0.1	17.1	45.00	25.87
52.00	1.46	0.2	9.9	48.00	30.56
55.00	4.65	0.3	3.0	49.50	33.92
57.00	7.96	0.4	1.5	52.00	42.09
61.00	14.84	0.5	0.5	53.50	42.83
65.00	20.96	0.6	0.3	55.00	38.77
67.00	23.73	0.6	0.2	57.00	29.20
69.00	26.33	0.7	0.2	59.00	22.03
70.00	27.59	0.7	0.2	61.00	16.66
72.50	30.55	0.8	0.2	63.00	14.04
80.00	38.67	1.2	0.1	65.00	11.17
82.50	41.07	1.4	0.1	67.00	10.62
85.00	43.54	1.6	0.1	69.00	8.06
87.50	45.78	1.8	0.1	70.00	7.57
90.00	47.97	2.2	0.1	72.50	7.70
100.00	56.91	4.1	0.1	75.00	7.14
133.50	68.38	5.2	0.1	80.00	6.57
150.00	67.23	4.2	0.1	81.00	4.93
163.00	68.62	4.6	0.1	82.50	3.61
170.50	69.35	3.3	0.1	85.00	0.84
175.00	69.36	5.8	0.1	87.50	1.23
185.50	77.07	8.8	0.1	90.00	0.73
192.50	69.51	5.2	0.1	100.00	0.70
200.00	71.27	9.7	0.1	125.00	0.69



**Mini-Circuits**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

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

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