

# Plug-In Low Pass Filter

## PLP-15+

50Ω DC to 15 MHz

### Maximum Ratings

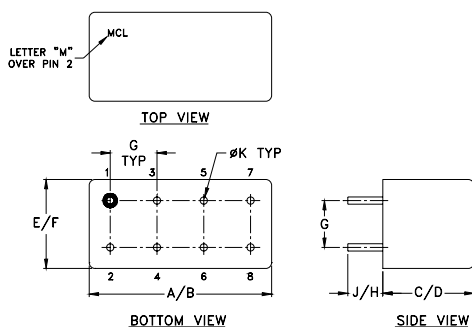
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

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)

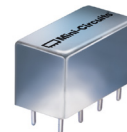
A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031	grams	
5.08	5.08	3.56	0.79	5.2	

### Features

- rugged 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

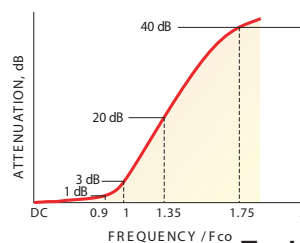
### +RoHS Compliant

The +Suffix identifies 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-15	17	23-32	32-200	1.7	18

### typical frequency response

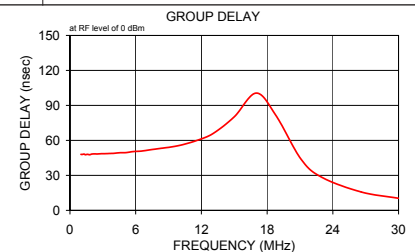
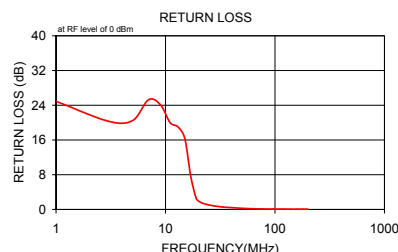
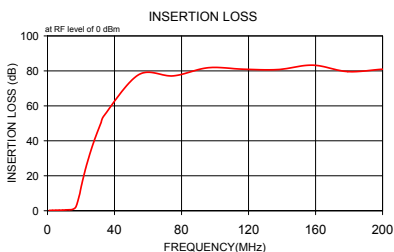


### electrical schematic



### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	$\sigma$			
1.00	0.21	0.04	24.91	1.00	48.07
3.00	0.26	0.04	20.32	1.10	47.91
5.00	0.30	0.04	20.46	1.30	48.21
7.00	0.33	0.05	25.27	1.40	47.67
9.00	0.38	0.05	24.09	1.60	48.07
11.00	0.47	0.07	20.00	1.80	47.68
13.00	0.58	0.07	19.00	2.00	48.30
15.00	0.81	0.06	16.36	2.30	48.44
17.00	2.32	0.37	7.61	2.50	48.37
19.00	8.82	0.63	2.63	2.90	48.63
19.80	12.25	0.57	2.04	3.20	48.63
20.60	15.66	0.53	1.72	3.60	48.80
21.40	18.93	0.50	1.51	4.00	48.88
22.20	22.02	0.48	1.36	4.60	49.48
23.00	24.94	0.48	1.25	5.10	49.49
23.80	27.72	0.47	1.15	5.80	50.43
25.40	32.87	0.50	0.99	6.50	50.77
27.10	37.90	0.60	0.86	7.30	51.87
28.70	42.24	0.70	0.76	8.20	53.05
30.40	46.55	0.86	0.67	9.30	54.47
32.00	50.45	1.02	0.60	10.40	56.61
33.60	54.18	1.48	0.55	11.70	60.33
54.40	77.82	6.04	0.22	13.10	66.08
75.20	77.17	4.69	0.12	15.00	80.27
96.00	81.80	4.39	0.09	17.00	100.53
116.80	80.95	4.80	0.08	18.80	81.42
137.60	80.75	3.87	0.07	21.10	43.84
158.40	83.26	4.95	0.07	23.00	28.31
179.20	79.58	3.64	0.06	26.60	15.72
200.00	80.96	5.21	0.06	30.00	10.37



### 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-Circuits' applicable established test performance criteria and measurement instructions.
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