

# Plug-In Low Pass Filter

## PLP-5+

50Ω DC to 5 MHz

### Maximum Ratings

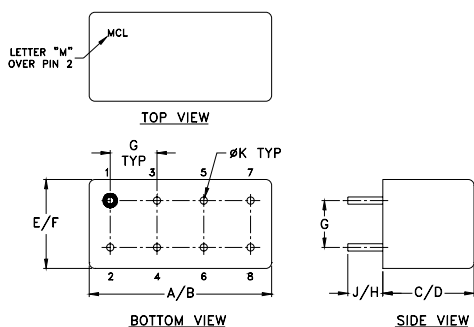
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

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



Generic photo used for illustration purposes only

CASE STYLE: A01

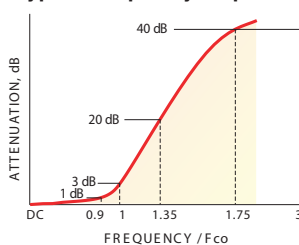
**+RoHS Compliant**

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

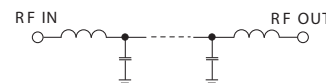
### Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco (MHz) Nom.	STOPBAND (MHz)		VSWR (:1)	
		(loss > 20 dB)	(loss > 40 dB)	Passband Typ.	Stopband Typ.
DC-5	6	8-10	10-200	1.7	18

### typical frequency response



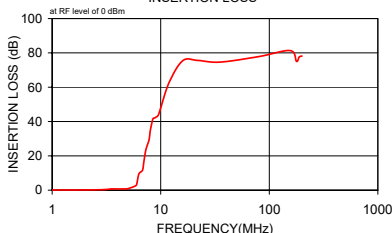
### electrical schematic



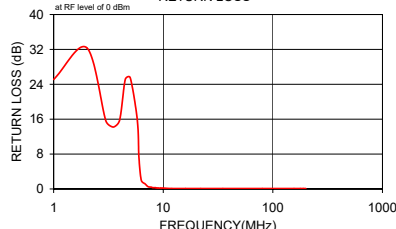
### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	$\sigma$			
1.0	0.08	0.1	25.1	1.0	147.47
2.0	0.13	0.1	32.4	2.0	150.99
3.0	0.34	0.1	15.6	3.0	158.96
3.5	0.69	0.1	14.2	3.5	164.57
4.0	0.71	0.1	15.8	4.0	173.42
4.5	0.73	0.1	25.1	4.5	192.06
5.0	0.91	0.1	25.5	5.0	215.98
5.8	2.41	0.7	15.8	5.3	253.98
6.0	3.35	0.8	7.2	5.8	294.32
6.3	9.49	1.3	2.0	6.0	326.82
6.8	11.67	1.1	1.2	6.3	305.70
7.0	16.87	1.2	0.9	6.8	223.89
7.3	23.49	1.1	0.5	7.0	180.77
7.8	29.30	1.0	0.4	7.3	106.74
8.0	34.55	1.0	0.3	7.8	73.25
8.3	39.27	1.0	0.3	8.0	54.49
8.5	41.68	1.1	0.3	8.3	38.64
8.8	42.05	1.1	0.2	8.5	31.12
9.0	42.44	1.1	0.2	8.8	29.13
9.5	43.73	1.1	0.2	9.0	28.46
10.0	47.90	1.1	0.2	9.5	27.23
12.0	63.04	1.6	0.1	10.0	26.91
16.0	75.52	4.1	0.1	12.0	26.68
22.0	75.62	9.9	0.1	13.0	25.95
35.0	74.63	3.9	0.1	14.0	25.34
80.0	77.85	6.6	0.1	16.0	24.48
156.0	81.35	8.6	0.1	18.0	24.08
178.0	75.08	2.3	0.1	20.0	24.00
189.0	77.64	6.8	0.1	22.0	23.82
200.0	78.15	5.2	0.1	24.0	23.72

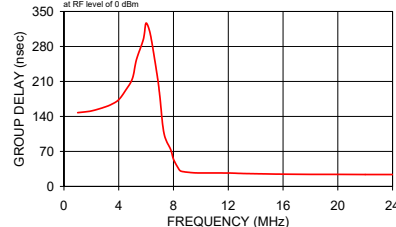
### INSERTION LOSS



### RETURN LOSS



### GROUP DELAY



### 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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