

# Plug-In Low Pass Filter

# PLP-1000+

50Ω DC to 900 MHz

## Maximum Ratings

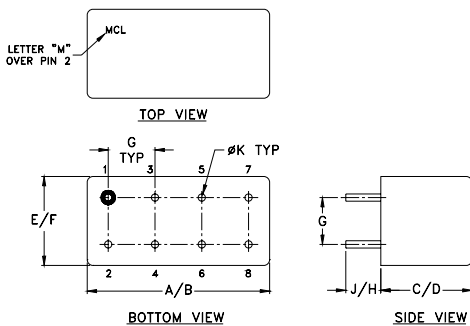
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

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

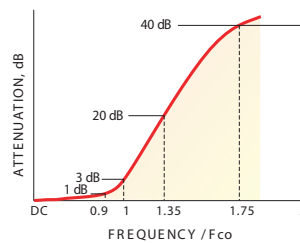
CASE STYLE: A01

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

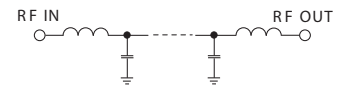
## Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco (MHz) Nom.	STOPBAND (MHz)		VSWR (:1)	
		(loss > 20 dB)	(loss > 40 dB)	Passband Typ.	Stopband Typ.
DC-900	990	1340-1750	1750-2000	1.7	18

## typical frequency response

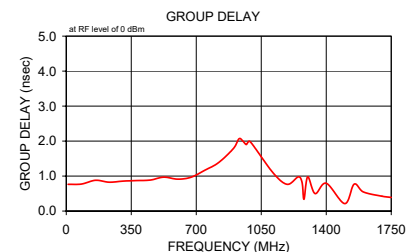
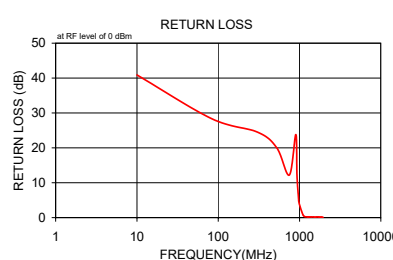


## electrical schematic



## Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	$\sigma$			
10.00	0.01	0.0	40.9	10.00	0.77
82.50	0.02	0.0	28.4	82.50	0.77
305.00	0.07	0.1	24.5	157.50	0.88
525.00	0.17	0.1	20.0	230.00	0.83
747.50	0.54	0.1	12.2	305.00	0.86
900.00	0.40	0.1	23.8	377.50	0.87
930.00	0.75	0.1	12.4	452.50	0.89
970.00	2.06	0.2	5.9	525.00	0.97
990.00	3.10	0.2	4.1	600.00	0.91
1115.00	12.75	0.5	0.6	672.50	0.97
1250.00	23.28	0.7	0.2	747.50	1.17
1270.00	24.76	0.8	0.2	820.00	1.39
1280.00	25.53	0.8	0.2	900.00	1.79
1300.00	27.07	0.9	0.2	930.00	2.07
1340.00	30.19	1.0	0.2	950.00	2.01
1400.00	34.90	1.2	0.2	970.00	1.90
1500.00	43.32	1.8	0.2	990.00	1.99
1550.00	48.04	2.6	0.1	1115.00	1.08
1600.00	53.09	3.9	0.2	1190.00	0.76
1700.00	61.90	8.3	0.2	1250.00	0.98
1750.00	58.54	3.6	0.1	1270.00	0.81
1760.06	58.62	6.4	0.1	1280.00	0.34
1790.00	57.18	2.8	0.1	1300.00	0.98
1800.00	56.81	1.9	0.1	1340.00	0.50
1820.00	55.81	3.2	0.1	1400.00	0.80
1850.00	54.77	2.3	0.1	1500.00	0.21
1860.00	53.85	1.3	0.1	1550.00	0.77
1880.00	53.19	1.8	0.1	1600.00	0.55
1900.05	52.56	1.6	0.1	1700.00	0.43
1950.00	50.28	1.1	0.1	1750.00	0.39



### 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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