

# Plug-In Low Pass Filter

## PLP-850+

50Ω DC to 780 MHz

### Maximum Ratings

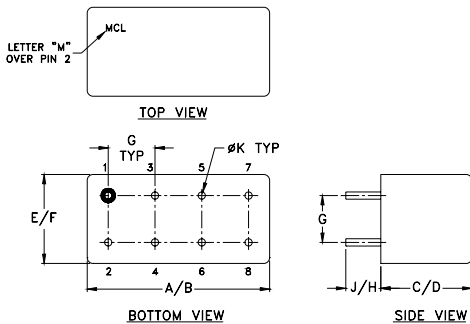
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

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)

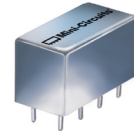
A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031	grams	
5.08	5.08	3.56	0.79	5.2	

### 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

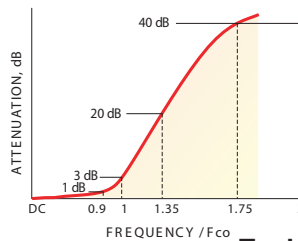
### +RoHS Compliant

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

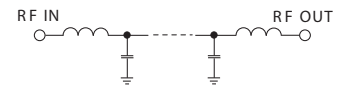
### Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco (MHz) Nom.	STOPBAND (MHz)		VSWR (:1)		
		(loss < 1 dB)	(loss > 20 dB)	(loss > 40 dB)	Passband Typ.	Stopband Typ.
DC-780	850		1100-1400	1400-2000	1.7	18

### typical frequency response



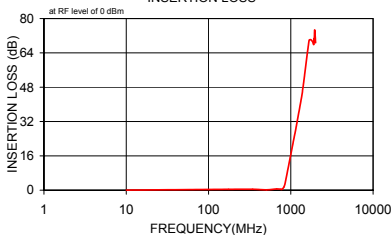
### electrical schematic



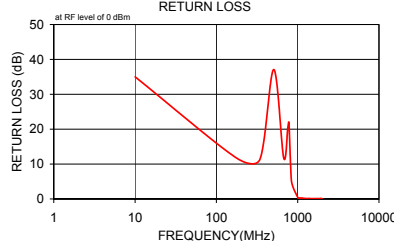
### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	$\sigma$			
10.00	0.02	0.1	35.0	10.0	1.00
175.00	0.38	0.1	11.8	92.5	1.05
342.50	0.44	0.1	11.3	175.0	0.94
507.50	0.18	0.1	37.1	257.5	0.95
672.50	0.57	0.1	11.8	342.5	0.97
755.00	0.43	0.1	20.2	425.0	1.22
780.00	0.40	0.1	21.9	507.5	1.35
820.00	1.33	0.6	9.1	590.0	1.40
850.00	3.00	0.9	4.4	672.5	1.38
1010.00	17.47	1.1	0.3	755.0	1.85
1030.00	19.18	1.1	0.2	780.0	2.23
1050.00	20.83	1.1	0.2	790.0	2.22
1060.00	21.63	1.1	0.2	820.0	2.55
1070.00	22.41	1.1	0.2	840.0	2.57
1100.00	24.70	1.1	0.2	850.0	2.36
1110.00	25.52	1.1	0.2	1010.0	0.99
1150.00	28.51	1.2	0.2	1020.0	0.92
1350.00	43.25	1.6	0.1	1030.0	0.88
1360.00	44.10	1.9	0.1	1050.0	0.78
1380.00	45.39	1.8	0.1	1060.0	0.75
1400.00	47.43	2.2	0.1	1070.0	0.80
1420.00	48.89	2.1	0.1	1100.0	0.84
1667.50	69.86	3.1	0.1	1110.0	0.70
1750.00	70.13	6.6	0.1	1120.0	0.70
1835.00	69.30	4.7	0.1	1150.0	0.69
1900.00	67.90	2.7	0.1	1300.0	0.45
1920.00	70.63	3.5	0.1	1350.0	0.02
1930.00	69.67	2.6	0.1	1360.0	0.24
1950.00	74.71	7.2	0.1	1380.0	0.48
2000.00	68.74	4.9	0.1	1400.0	0.05

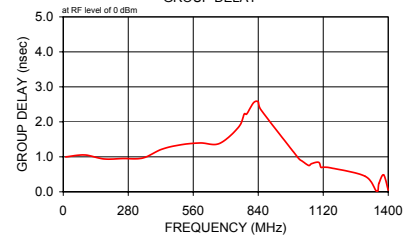
### INSERTION LOSS



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