

# Plug-In Low Pass Filter

PLP-90+

50Ω DC to 81 MHz

## Maximum Ratings

Operating Temperature -55°C to 100°C

Storage Temperature -55°C to 100°C

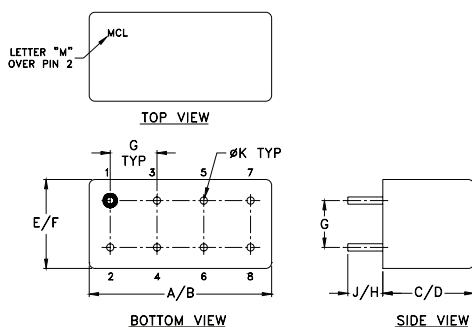
RF Power Input 0.5W max.

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)

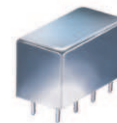
A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K		wt
.200	.20	.14	.031		grams
5.08	5.08	3.56	0.79		5.2

## 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

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

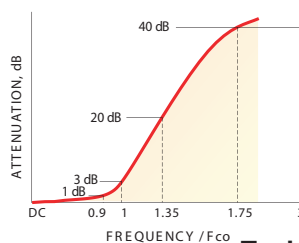
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

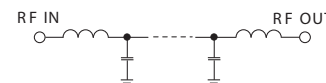
## Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco (MHz) Nom.	STOPBAND (MHz)		VSWR (:1)	
		(loss > 20 dB)	(loss > 40 dB)	Passband Typ.	Stopband Typ.
DC-81	90	121-157	157-400	1.7	18

## typical frequency response

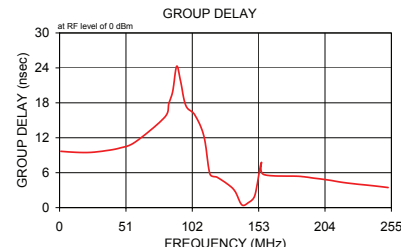
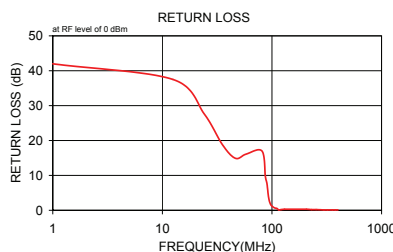


## electrical schematic



## Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	$\sigma$			
1.00	0.05	0.1	42.0	1.00	9.672
12.50	0.14	0.1	37.5	12.50	9.503
24.00	0.18	0.1	27.7	24.00	9.491
35.50	0.31	0.1	18.7	35.50	9.776
46.50	0.42	0.1	14.9	46.50	10.240
58.00	0.43	0.1	16.1	58.00	11.244
81.00	0.69	0.1	17.0	81.00	15.573
87.00	1.28	0.4	9.7	84.00	17.894
90.00	2.01	0.5	7.6	87.00	19.997
93.00	6.43	0.9	3.8	90.00	24.263
97.00	8.74	1.0	1.7	93.00	21.734
104.01	12.94	1.1	0.8	97.00	17.532
111.00	16.72	1.2	0.5	104.00	15.893
115.52	21.91	1.2	0.1	111.00	12.218
121.03	26.16	1.2	0.2	115.50	5.804
130.03	32.40	1.3	0.3	121.00	5.229
140.04	38.50	1.4	0.3	130.00	3.892
145.04	41.31	1.4	0.3	135.00	2.740
150.04	43.98	1.5	0.3	140.00	0.487
155.05	46.76	1.7	0.3	145.00	0.841
157.05	47.69	1.8	0.3	150.00	2.060
184.06	60.11	2.9	0.3	155.00	7.687
206.57	66.87	1.4	0.3	157.00	5.680
229.58	75.03	5.6	0.2	184.00	5.380
252.57	74.83	7.6	0.2	195.50	5.060
298.08	76.96	7.1	0.1	206.50	4.740
321.08	75.07	4.9	0.1	218.00	4.320
355.57	73.10	4.4	0.1	229.50	4.010
378.08	75.50	4.8	0.1	241.00	3.760
400.07	74.56	6.3	0.1	252.50	3.450



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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