

# Plug-In Low Pass Filter

## PBLP-156+ PBLP-156

50Ω Flat Time Delay DC to 94 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

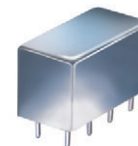
INPUT	1
OUTPUT	8
GROUND	2,3,4,5,6,7
CASE GROUND	2,3,4,5,6,7

### Features

- flat group delay for low pulse distortion
- rugged shielded case, hermetic
- other PBLP models available with wide selection of cut-off frequencies

### Applications

- linear modulation techniques
- voice transmission applications
- digital communications



CASE STYLE: A01  
PRICE: \$22.20 ea. QTY: 1-9

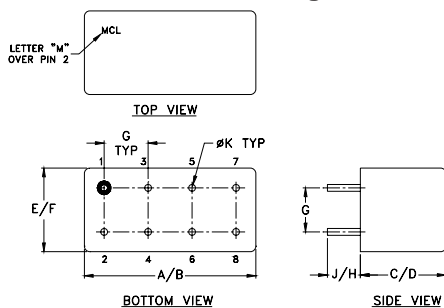
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

### Low Pass Filter Electrical Specifications

PASSBAND (MHz) (loss <1.2 dB) Min.	f <sub>co</sub> , MHz Nom. (loss 3 dB)	STOPBAND (MHz)		VSWR (:1)		GROUP DELAY VARIATION (nsec)		
		(loss > 10 dB)	(loss > 20 dB)	DC-0.2f <sub>co</sub> X	DC-0.6f <sub>co</sub> X	DC-f <sub>co</sub> X	DC-2f <sub>co</sub> X	DC-2.67f <sub>co</sub> X
DC-94	156	312-416	416	1.3:1	1.1:1	0.3	1.1	1.5

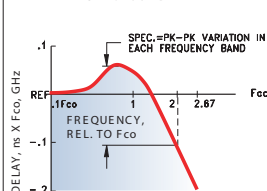
### Outline Drawing



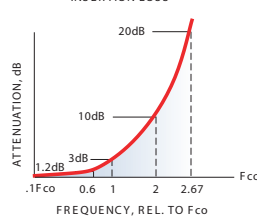
### Outline Dimensions (inch/mm)

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	

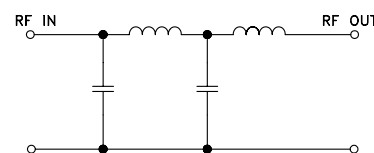
TYPICAL GROUP DELAY



TYPICAL FREQUENCY RESPONSE INSERTION LOSS

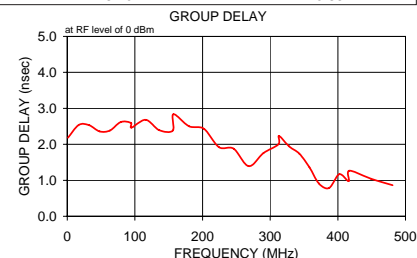
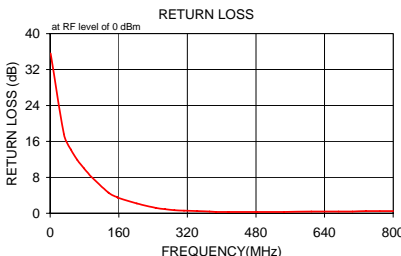
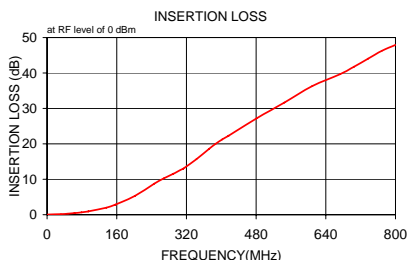


electrical schematic



### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	$\sigma$			
1.0	0.05	0.1	35.6	1.0	2.185
32.0	0.17	0.1	17.6	17.0	2.540
48.0	0.30	0.1	14.2	32.0	2.534
63.0	0.46	0.1	11.9	48.0	2.358
79.0	0.68	0.1	10.0	63.0	2.382
94.0	0.92	0.1	8.3	79.0	2.619
95.0	0.93	0.1	8.2	94.0	2.595
136.0	1.98	0.1	4.6	95.0	2.467
156.0	2.79	0.2	3.6	116.0	2.682
157.0	2.85	0.2	3.5	136.0	2.392
202.0	5.33	0.2	2.2	156.0	2.383
246.0	8.75	0.3	1.2	157.0	2.835
268.0	10.25	0.3	0.9	180.0	2.501
290.0	11.57	0.3	0.7	202.0	2.433
312.0	12.97	0.3	0.6	224.0	1.923
313.0	13.03	0.3	0.6	246.0	1.878
343.0	15.67	0.3	0.5	268.0	1.392
372.0	18.60	0.3	0.4	290.0	1.756
387.0	20.01	0.3	0.3	312.0	2.001
402.0	21.23	0.3	0.3	313.0	2.235
416.0	22.25	0.3	0.3	328.0	1.944
417.0	22.32	0.3	0.3	343.0	1.740
481.0	27.17	0.5	0.3	358.0	1.360
545.0	31.67	0.7	0.3	372.0	0.911
609.0	36.32	1.0	0.4	387.0	0.786
673.0	39.65	1.2	0.4	402.0	1.170
705.0	41.78	1.2	0.4	416.0	0.978
737.0	44.07	1.6	0.5	417.0	1.269
769.0	46.28	1.6	0.5	449.0	1.042
800.0	47.95	1.8	0.5	481.0	0.864



**Mini-Circuits**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED

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

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