

# Plug-In Low Pass Filter

## PLP-2.5+

50Ω DC to 2.5 MHz

### Maximum Ratings

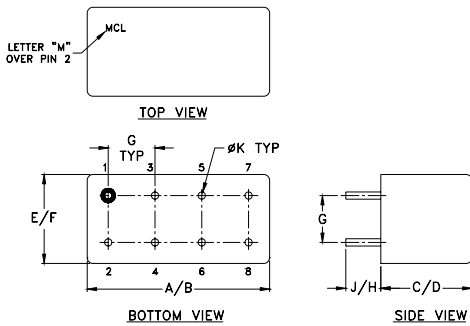
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

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)

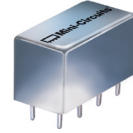
A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031	grams	
5.08	5.08	3.56	0.79	5.2	

### 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



CASE STYLE: A01

### +RoHS Compliant

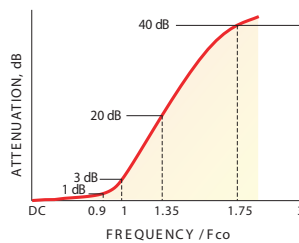
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

### Low Pass Filter Electrical Specifications

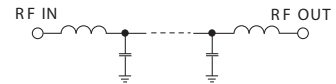
PASSBAND (MHz)	fco (MHz) Nom.	STOPBAND (MHz)		VSWR (:1)	
		(loss > 20 dB)	(loss > 40 dB)	Passband Typ.	Stopband Typ.
DC-2.5	2.75	3.8-5.0	5.0-200	1.7	18

1 dB compression at +13 dBm input power

### typical frequency response

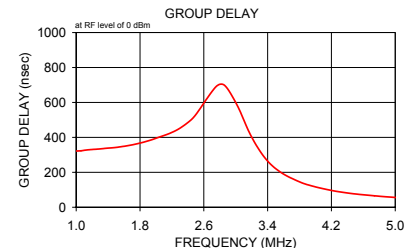
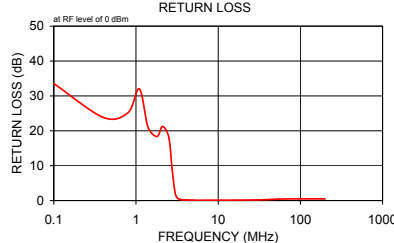


### electrical schematic



### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	$\sigma$			
0.10	0.06	0.00	33.53	1.00	321.99
0.40	0.08	0.01	23.85	1.06	323.09
0.80	0.10	0.01	25.18	1.12	327.26
1.10	0.12	0.00	32.02	1.18	330.19
1.40	0.17	0.01	21.06	1.25	332.28
1.80	0.24	0.01	18.34	1.32	334.96
2.10	0.28	0.04	21.26	1.40	338.56
2.50	0.45	0.07	18.25	1.48	341.36
2.75	1.34	0.45	9.00	1.56	346.34
3.00	5.99	1.21	2.08	1.65	352.96
3.20	11.74	1.32	0.71	1.74	360.97
3.30	14.61	1.31	0.48	1.84	372.10
3.50	19.96	1.23	0.29	1.94	385.34
3.60	22.44	1.20	0.25	2.05	402.77
3.80	27.02	1.14	0.19	2.17	422.48
4.00	31.16	1.09	0.17	2.29	449.68
4.20	34.94	1.06	0.15	2.42	492.19
4.40	38.42	1.03	0.14	2.50	530.37
4.60	41.65	1.00	0.12	2.75	689.14
4.80	44.65	0.98	0.12	2.86	697.89
5.00	47.46	0.98	0.11	3.02	582.03
5.20	50.11	0.99	0.10	3.19	410.17
29.60	89.73	3.84	0.19	3.37	280.46
53.90	87.32	1.38	0.43	3.56	201.19
78.30	89.67	4.26	0.48	3.80	145.71
102.60	86.70	3.08	0.49	3.98	119.20
127.00	88.19	4.27	0.49	4.20	96.41
151.30	90.79	3.34	0.48	4.44	79.41
175.70	90.31	4.10	0.48	4.74	65.38
200.00	93.47	9.35	0.47	5.01	55.83



### 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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