

# Plug-In Low Pass Filter

## PLP-300+

50Ω DC to 270 MHz

### Maximum Ratings

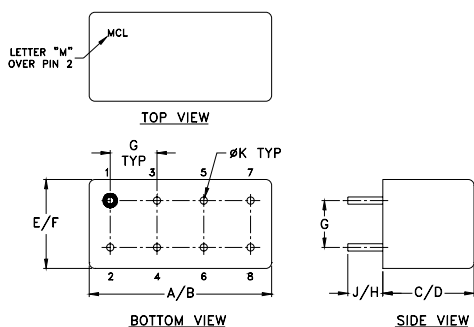
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

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)

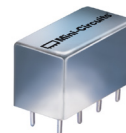
A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K	wt	
.200	.508	.14	.031	grams	
5.08	5.08	3.56	0.79	5.2	

### 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

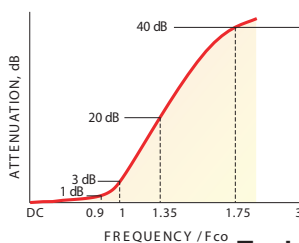
### +RoHS Compliant

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

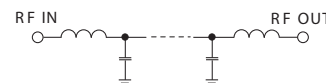
### Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco (MHz) Nom.	STOPBAND (MHz)		VSWR (:1)	
		(loss > 20 dB)	(loss > 40 dB)	Passband Typ.	Stopband Typ.
DC-270	297	410-550	550-1200	1.7	18

### typical frequency response

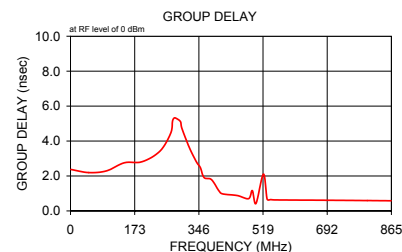
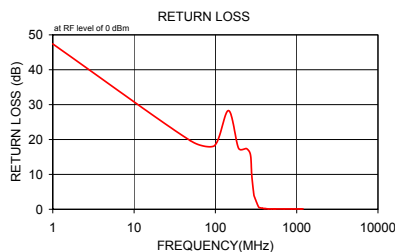
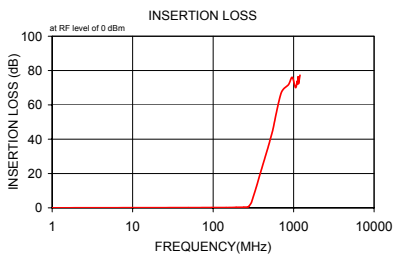


### electrical schematic



### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	$\sigma$			
1.00	0.02	0.1	47.4	1.00	2.37
49.00	0.13	0.1	19.7	49.00	2.20
97.00	0.17	0.1	18.2	97.00	2.29
145.00	0.15	0.1	28.3	145.00	2.76
193.00	0.28	0.1	17.5	193.00	2.82
241.00	0.36	0.1	17.4	241.00	3.42
270.00	0.53	0.1	15.6	270.00	4.45
280.00	1.00	0.1	9.8	275.00	5.14
297.00	2.83	0.2	4.3	280.00	5.33
300.00	3.29	0.2	3.8	290.00	5.24
340.00	11.27	0.3	0.7	297.00	5.08
360.00	15.31	0.3	0.4	300.00	5.24
380.00	19.09	0.4	0.3	320.00	3.64
400.00	22.62	0.4	0.2	340.00	2.79
410.00	24.31	0.4	0.2	350.00	2.49
450.00	30.64	0.6	0.1	360.00	1.91
490.00	36.51	0.9	0.1	380.00	1.79
520.00	40.88	1.2	0.1	400.00	1.15
530.00	42.34	1.3	0.1	410.00	0.98
540.00	43.72	1.3	0.1	450.00	0.88
550.00	45.07	1.5	0.1	480.00	0.70
700.00	66.82	5.7	0.1	490.00	1.16
864.00	71.78	6.6	0.1	500.00	0.43
960.00	76.06	6.9	0.1	520.00	2.11
1056.00	70.05	3.2	0.1	530.00	0.67
1110.00	73.87	7.7	0.1	540.00	0.65
1120.00	72.31	5.1	0.1	550.00	0.63
1140.00	76.33	5.1	0.1	700.00	0.61
1150.00	72.33	3.5	0.1	800.00	0.59
1200.00	77.29	5.8	0.1	864.00	0.58



### 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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