

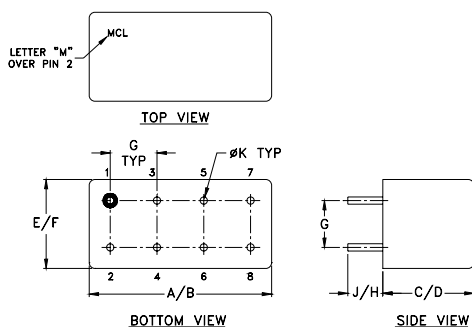
75Ω DC to 98 MHz

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)**

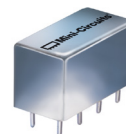
A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031	grams	
5.08	5.08	3.56	0.79	5.2	

Features

- rugged welded case, hermetic
- other standard and custom PLP models available with wide selection of fco

Applications

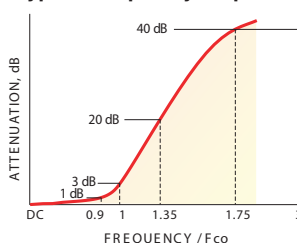
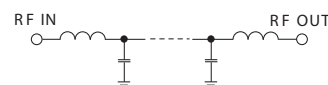
- test equipment
- lab use
- transmitters/receivers
- military/hi-rel applications



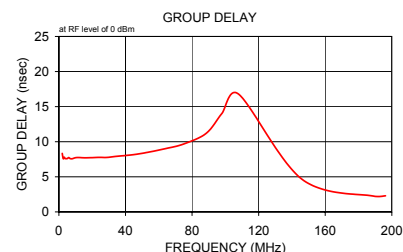
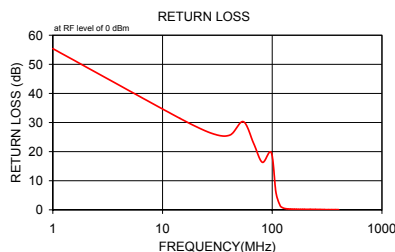
CASE STYLE: A01

Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco (MHz) Nom.	STOPBAND (MHz)	VSWR (:1)
(loss < 1 dB)	(loss 3 dB)	(loss > 20 dB) (loss > 40 dB)	Passband Typ. Stopband Typ.
DC-98	108	146-189 189-400	1.7 18

typical frequency response**electrical schematic****Typical Performance Data**

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
$\bar{x}$	σ			
1.00	1.00	0.00	2.00	8.34
14.40	0.09	0.00	2.34	7.84
27.80	0.14	0.00	2.73	7.56
41.10	0.18	0.01	3.19	7.79
54.50	0.22	0.01	3.72	7.62
67.90	0.29	0.01	4.34	7.59
81.30	0.45	0.04	5.07	7.61
98.00	0.62	0.07	5.91	7.74
108.00	2.25	0.40	6.90	7.59
118.00	7.71	0.73	8.05	7.58
123.60	11.47	0.75	9.39	7.69
129.20	15.15	0.72	10.96	7.75
134.80	18.64	0.71	12.94	7.74
140.40	21.90	0.69	15.10	7.71
146.00	24.97	0.68	17.83	7.72
151.60	27.86	0.69	20.81	7.74
159.10	31.52	0.70	24.57	7.77
166.60	34.94	0.73	28.67	7.76
174.00	38.15	0.75	33.85	7.90
181.50	41.21	0.85	39.50	8.02
189.00	44.21	0.98	46.64	8.21
196.50	47.04	1.03	54.43	8.54
221.90	56.41	1.79	64.27	9.03
247.40	67.24	4.43	75.00	9.68
272.80	77.49	6.61	88.56	11.21
298.30	75.88	6.64	98.00	14.05
323.70	73.99	6.37	108.00	16.77
349.10	71.06	5.19	146.00	4.66
374.60	69.94	3.57	189.00	2.25
403.00	65.59	2.49	196.20	2.29

**Notes**

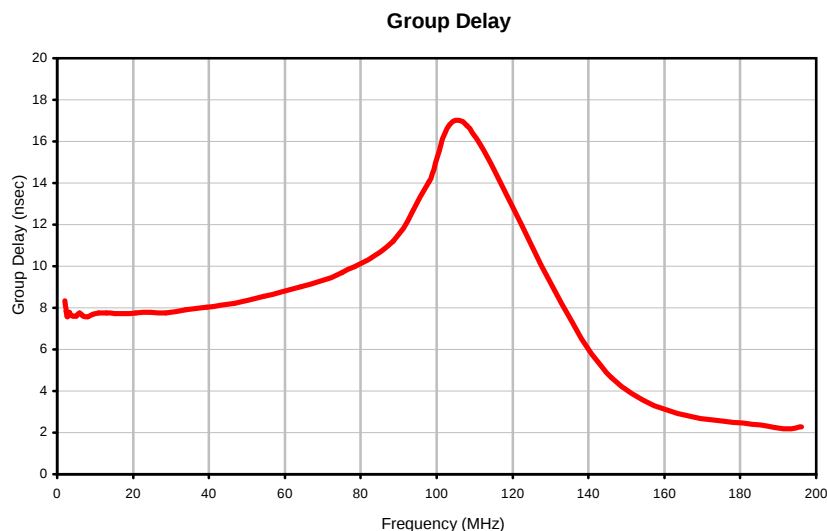
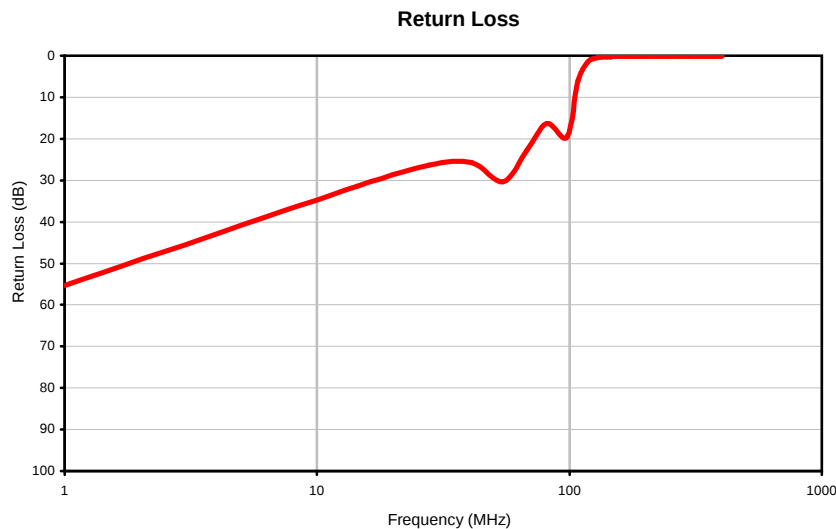
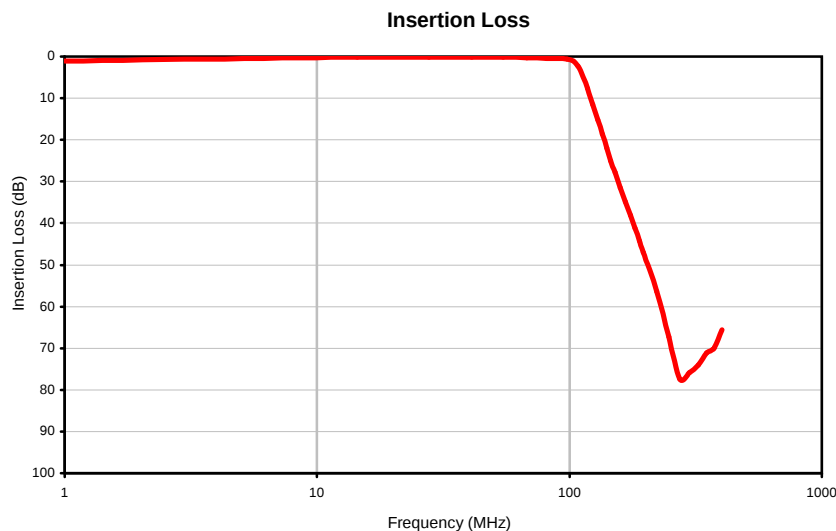
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Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)	FREQUENCY (MHz)	GROUP DELAY (nsec)
1.00	1.00	55.39	2.00	8.340
14.40	0.09	31.44	2.34	7.840
27.80	0.14	26.34	2.73	7.560
41.10	0.18	25.69	3.19	7.790
54.50	0.22	30.30	3.72	7.620
67.90	0.29	22.73	4.34	7.590
81.30	0.45	16.35	5.07	7.610
98.00	0.62	19.63	5.91	7.740
108.00	2.25	6.07	6.90	7.590
118.00	7.71	1.47	8.05	7.580
123.60	11.47	0.78	9.39	7.690
129.20	15.15	0.50	10.96	7.750
134.80	18.64	0.37	12.94	7.740
140.40	21.90	0.30	15.10	7.710
146.00	24.97	0.26	17.83	7.720
151.60	27.86	0.23	20.81	7.740
159.10	31.52	0.21	24.57	7.770
166.60	34.94	0.19	28.67	7.760
174.00	38.15	0.18	33.85	7.900
181.50	41.21	0.18	39.50	8.020
189.00	44.21	0.17	46.64	8.210
196.50	47.04	0.17	54.43	8.540
221.90	56.41	0.16	64.27	9.030
247.40	67.24	0.14	75.00	9.680
272.80	77.49	0.11	88.56	11.210
298.30	75.88	0.10	98.00	14.050
323.70	73.99	0.08	108.00	16.770
349.10	71.06	0.08	146.00	4.660
374.60	69.94	0.08	189.00	2.250
403.00	65.59	0.08	196.20	2.290

Typical Performance Curves



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 CERTIFIED • RoHS compliant
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REV. X1
PLP-100-75
060725
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A01
A04
A05
A06

Outline Dimensions



CASE#	A	B	C	D	E	F	G	H	J	K	WT, GRAM
A01	.770 (19.56)	.800 (20.32)	.385 (9.78)	.400 (10.16)	.370 (9.40)	.400 (10.16)	.200 (5.08)	.20 (5.08)	.14 (3.56)	.031 (.79)	5.2
A04			.200 (5.08)	.210 (5.33)							3.7
A05			.240 (6.10)	.250 (6.35)							3.7
A06			.285 (7.24)	.310 (7.87)							5.2

Dimensions are in inches (mm). Tolerances: 2 Pl. $\pm .03$; 3 Pl. $\pm .015$

Notes:

- Header material: C.R.S.
Pin material: #52 alloy.
Cover material: Cupro-Nickel.
- Pin finish: Electro Tin-Silver.
- Insulated spacer available. Request P/N B14-045-01.
- Tolerance on pin diameter $\pm .005$ inch.
- Glass meniscus 0.015 inch max.
- Blue bead indicates Pin 1. Pin numbers do not appear on unit, for reference only.



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All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Thermal Shock	-55° to 100°C, 100 cycles	MIL-STD-202, Method 107, Condition A-3, except +100°C
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D
Mechanical Shock	50g, 11 ms, 1/2-sine, 18 shocks: 3 each direction, each of 3 axes	MIL-STD-202, Method 213, Condition A
Moisture Resistance	10 cycles, 24 hours per cycle	MIL-STD-202, Method 106, Condition A, except 50°C and end point electrical test done within 12 hours
Solderability	10X Magnification	J-STD-002, 95% Coverage
Resistance to Solder Heat	260°C for 10 seconds	MIL-STD-202, Method 210, Condition B
Marking Resistance to Solvents	Isopropyl alcohol + mineral spirits at 25°C; terpene defluxer at 25°C; distilled water + proylene glycol monomethyl ether + monoethanolamine at 63°C to 70°C	MIL-STD-202, Method 215
Terminal Strength	4 1/2 Pound Pull	MIL-STD-202, Method 211, Condition A



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Specification	Test/Inspection Condition	Reference/Spec
Gross Leak	125°C Bubble Test	MIL-STD-202, Method 112, Condition D
Barometric Pressure	100,000 Feet	MIL-STD-202, Method 105, Condition D