

# Low Pass Filter

50Ω DC to 900 MHz

## RLP-900+



Generic photo used for illustration purposes only  
CASE STYLE: GP731

**+RoHS Compliant**

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

Available Tape and Reel at no extra cost	
Reel Size	Devices/Reel
7"	10, 20, 50, 100, 200
13"	500, 1000

### Maximum Ratings

Operating Temperature	-40°C to 85°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

RF IN	2
RF OUT	6
GROUND	1, 3, 4, 5, 7, 8

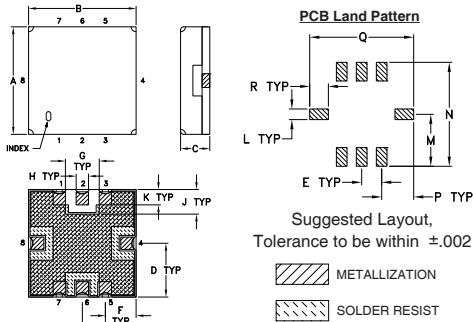
### Features

- high rejection
- sharp insertion loss roll off
- excellent VSWR, 1.2:1 typ. @ passband
- aqueous washable

### Applications

- wireless communications
- receivers / transmitters

### Outline Drawing

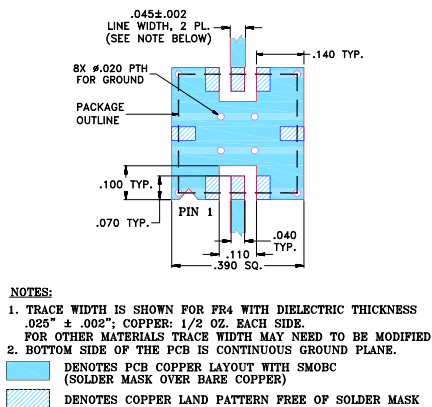


### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J
.350	.350	.100	.175	.075	.100	.110	.040	.080
8.89	8.89	2.54	4.45	1.91	2.54	2.79	1.02	2.03
K	L	M	N	P	Q	R		wt.
.050	.040	.195	.390	.120	.390	.070		grams
1.27	1.02	4.95	9.91	3.05	9.91	1.78		0.25

Note: Please refer to case style drawing for details

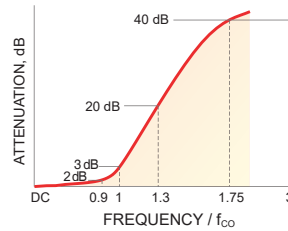
### Demo Board MCL P/N: TB-332 Suggested PCB Layout (PL-176)



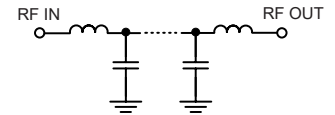
### Low Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

PASSBAND (MHz)	f <sub>co</sub> , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC - 900	1000	1300 - 1750	1750 - 2900	1.2	20

### Typical Frequency Response

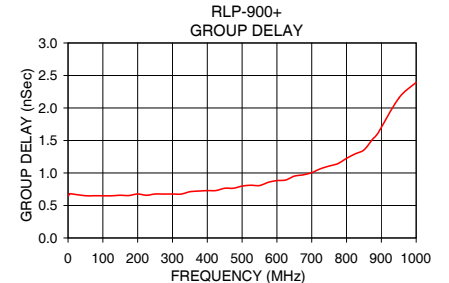


### Functional Schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	$\bar{x}$	$\sigma$			
0.5	0.02	0.00	51.49	1.0	0.64
50.0	0.08	0.00	41.46	50.0	0.65
250.0	0.21	0.01	31.46	100.0	0.65
400.0	0.31	0.01	23.11	150.0	0.66
600.0	0.44	0.01	21.51	200.0	0.68
800.0	0.62	0.02	23.69	300.0	0.68
900.0	0.82	0.02	30.02	350.0	0.71
960.0	1.40	0.08	13.20	400.0	0.73
1000.0	2.94	0.25	6.03	450.0	0.77
1040.0	6.07	0.38	2.71	500.0	0.80
1100.0	12.23	0.42	1.08	550.0	0.81
1200.0	22.10	0.36	0.54	650.0	0.95
1300.0	30.42	0.35	0.38	700.0	1.01
1400.0	36.91	0.35	0.32	750.0	1.11
1750.0	47.65	0.37	0.26	800.0	1.23
2000.0	48.61	0.31	0.26	850.0	1.35
2500.0	49.49	0.52	0.28	900.0	1.65
2900.0	58.98	3.62	0.33	1000.0	2.39



### 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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