

Low Pass Filter

RLP-30+

50Ω DC to 30 MHz

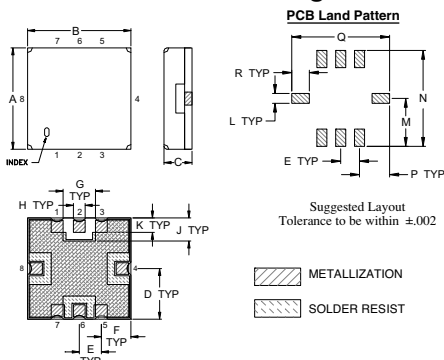
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max

Pin Connections

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

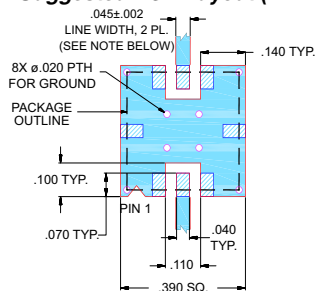
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J
.350	.350	.150	.175	.075	.100	.110	.040	.080
8.89	8.89	3.81	4.45	1.93	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	0.50	

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



- NOTES: 1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .025" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- High rejection
- Sharp Insertion Loss roll off
- Excellent VSWR, 1.15:1 typ. @ Passband
- Aqueous washable

Applications

- Satellite
- Wireless Communications
- Receivers / Transmitters



CASE STYLE: GP1212
PRICE: \$7.95 ea. QTY (10-49)

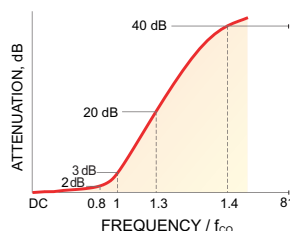
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

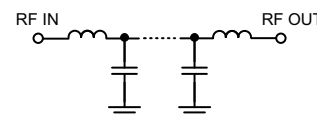
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

PASSBAND (MHz)	f _{co} , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC - 30	37	47 - 53	53 - 3000	1.15	20

Typical Frequency Response

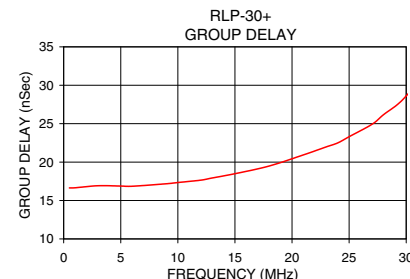
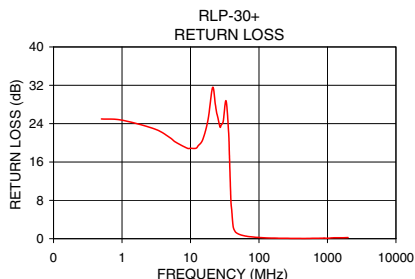
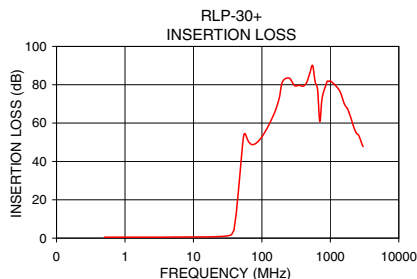


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	\bar{x}	σ			
0.5	0.50	0.01	24.98	0.5	16.64
25.0	0.86	0.01	25.36	1.0	16.66
30.0	1.08	0.01	24.46	3.0	16.92
36.0	1.85	0.05	22.30	5.0	16.88
37.0	2.62	0.14	17.45	6.0	16.86
39.0	4.17	0.33	7.75	9.0	17.18
40.0	6.92	0.45	6.00	10.0	17.34
42.0	12.41	0.68	2.51	12.0	17.65
45.0	23.23	0.76	1.47	13.0	17.93
47.0	30.50	0.84	1.21	15.0	18.49
53.0	50.90	1.81	0.84	18.0	19.49
100.0	52.85	0.47	0.25	21.0	20.94
500.0	85.89	4.68	0.07	23.0	21.98
1000.0	81.99	3.92	0.09	24.0	22.50
1400.0	76.06	1.88	0.20	25.0	23.31
2000.0	62.57	0.80	0.24	27.0	24.92
2600.0	53.56	0.54	0.48	28.0	26.15
3000.0	47.74	0.53	0.33	30.0	28.61



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



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RF/IF MICROWAVE COMPONENTS

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