

Bandpass Filter

PBP-30

50Ω Elliptic Response 27 to 33 MHz

Maximum Ratings

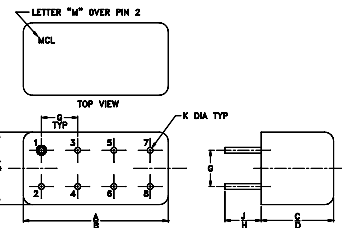
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

Pin Connections

INPUT	1
OUTPUT	8
GROUND	2,3,4,5,6,7
CASE GROUND	2,3,4,5,6,7
DEMO BOARD	TB-305

Demo Board MCL P/N: TB-305

Outline Drawing



Outline Dimensions (inch)

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

- low insertion loss, 1.5 dB max.
- good selectivity, 1.76 typ. 20 dB/3 dB BW ratio
- rugged shielded case, hermetically sealed

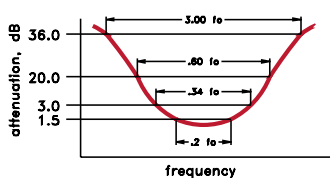
Applications

- military hi-rel systems
- high rejection applications
- image rejection
- IF signal processing

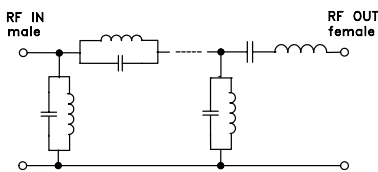
Bandpass Filter Electrical Specifications

MODEL NO.	CENTER FREQ. (MHz)	PASSBAND (MHz)	3dB BANDWIDTH (MHz)	STOPBANDS		VSWR (:1)	
		I.L. 1.5 dB Max.		Typ.	(I. loss > 20 dB) at MHz	(I. loss > 35 dB) at MHz	Passband Max.
PBP-30	30	27-33	25-35	22 & 40	3.2 & 99-1000	1.7	16

typical frequency response



electrical schematic



Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	\bar{x}	σ		
1.0	81.68	9.6	2.8	30.059
1.4	73.69	2.1	3.2	21.884
1.9	70.39	1.8	3.3	12.226
2.3	67.50	1.2	9.6	7.216
2.8	65.09	0.9	15.8	11.923
3.2	61.70	1.3	22.0	89.768
4.0	58.09	0.6	23.2	56.479
16.0	30.42	0.6	23.6	40.798
22.0	32.26	2.3	24.4	22.806
23.0	26.30	1.7	24.8	103.619
23.7	15.68	1.1	26.2	115.164
24.3	8.44	1.0	27.1	99.025
25.0	3.86	0.6	28.0	78.962
27.0	1.28	0.1	28.5	72.223
29.3	1.02	0.1	29.5	64.660
30.5	1.02	0.1	30.0	62.760
32.8	1.16	0.1	31.1	61.836
35.0	2.37	0.3	31.6	62.724
36.0	4.69	0.5	32.2	64.652
37.3	11.24	0.9	32.7	67.765
38.7	21.64	1.2	33.9	76.095
40.0	38.75	2.0	35.1	80.917
50.0	26.83	0.5	36.3	75.838
82.7	39.42	0.4	37.6	9.558
99.0	43.92	0.6	38.9	16.978
190.0	65.36	2.3	40.3	34.601
392.5	80.00	3.9	41.0	41.413
595.0	59.40	2.2	59.9	3.448
797.5	50.83	1.8	80.4	1.230
1000.0	43.35	2.3	97.2	0.971

