

Surface Mount Bandpass Filter

BPF-C73+

50Ω 63 to 85 MHz

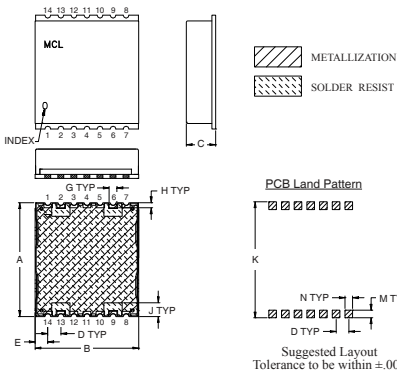
Maximum Ratings

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

INPUT	2
OUTPUT	9
NOT CONNECTED	6,13
GROUND	1, 3, 4, 5, 7,8,10,11,12,14

Outline Drawing

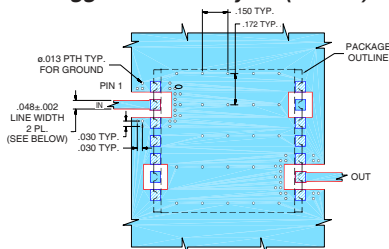


Outline Dimensions (inch/mm)

A	B	C	D	E	G	H	J	K	M	N	wt.
.870	.800	.25	.100	.097	.060	.040	.105	.910	.060	.060	grams
22.10	20.32	6.35	2.54	2.46	1.52	1.02	2.67	23.11	1.52	1.52	2.85

Note: Please refer to case style drawing for details

Demo Board MCL P/N: TB-500+ Suggested PCB Layout (PL-294)



- NOTES:
- TRACE WIDTH IS SHOWN FOR ROGERS RO4350B, DIELECTRIC THICKNESS: .030±.002; COPPER: 1/2 OZ EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 - 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
- Good VSWR, 1.2:1 typ @ passband
- Flat group delay
- Shielded case
- Aqueous washable

Applications

- Industrial microwave and RF
- Receivers / transmitters
- Harmonic rejection



Generic photo used for illustration purposes only
CASE STYLE: HU1186

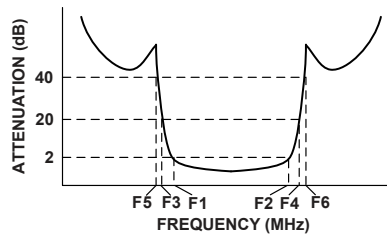
+RoHS Compliant

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

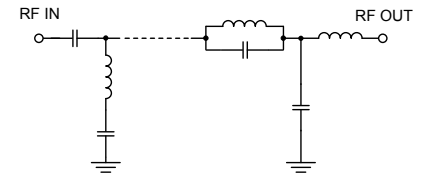
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 2dB)	STOPBANDS (MHz)				VSWR (:1)		
		Loss > 20dB		Loss > 40dB		Passband		Stopband
F _c	F ₁ - F ₂	F ₃	F ₄	F ₅	F ₆	Typ.	Max.	Typ.
73	63 - 85	45	105	40	110 - 550	1.2	1.6	18

Typical Frequency Response

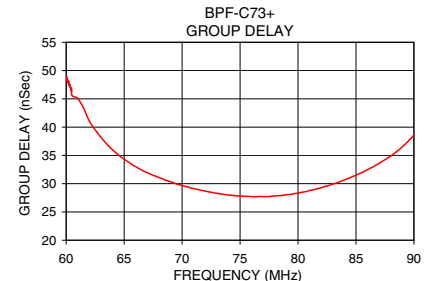
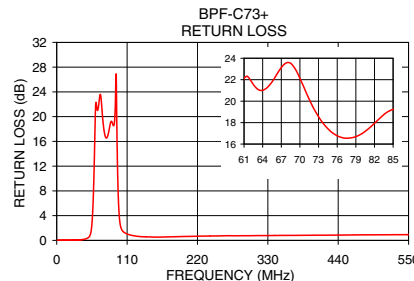
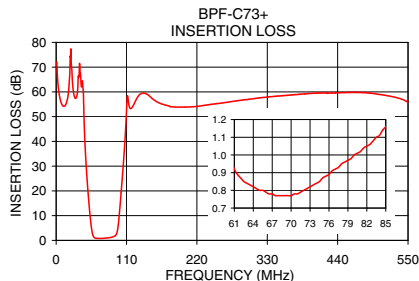


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	\bar{x}	σ			
1.0	72.16	0.34	0.01	60.0	48.69
40.0	62.23	5.02	0.13	61.0	45.08
45.0	39.35	4.53	0.24	62.0	41.06
50.0	18.88	3.18	0.49	63.0	38.21
53.0	9.99	2.53	1.12	64.0	36.00
55.0	5.38	1.66	2.61	66.0	33.01
57.0	2.48	0.69	6.51	70.0	29.66
63.0	0.84	0.05	21.21	72.0	28.69
70.0	0.77	0.02	22.12	73.0	28.29
73.0	0.82	0.02	18.54	74.0	27.98
80.0	1.00	0.03	16.98	75.0	27.81
85.0	1.16	0.02	19.23	76.0	27.71
94.0	2.44	0.05	18.08	80.0	28.33
97.0	6.11	0.31	5.16	82.0	29.28
100.0	14.51	0.29	2.20	84.0	30.65
105.0	30.91	0.28	1.32	85.0	31.49
110.0	52.83	1.53	1.04	87.0	33.60
550.0	55.83	0.26	0.94	90.0	38.60



- Notes
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