Surface Mount

Bandpass Filter

BPF-C73+

50Ω 63 to 85 MHz

CASE STYLE: HU1186
PRICE: $26.95 ea. QTY (1-9)

+ 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.

Maximum Ratings

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

Pin Connections

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

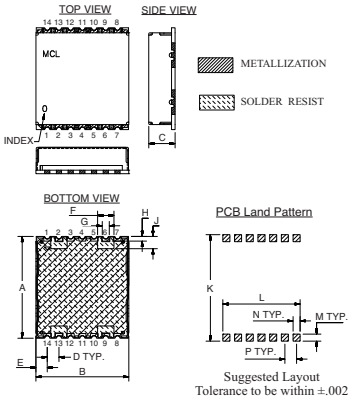
Features

- 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

Outline Drawing

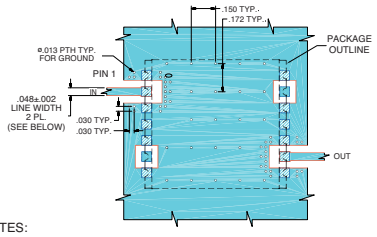


Outline Dimensions (inch / mm)

A	B	C	D	E	F	G
.870	.800	.250	.100	.097	.140	.060
22.10	20.32	6.34	2.54	2.46	3.56	1.52

H	J	K	L	M	N	P	wt.
.040	.105	.910	.660	.060	.060	.100	grams
1.02	2.67	23.11	5.72	1.52	1.52	2.54	4.0

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



NOTES:
1. 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.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

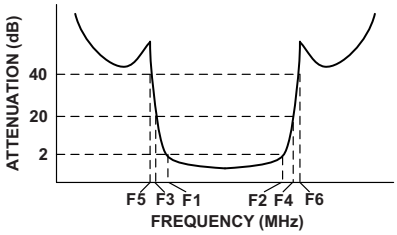
DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

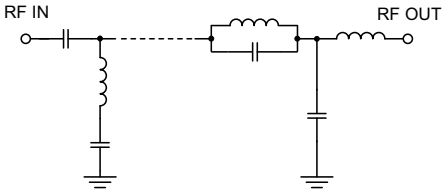
Bandpass Filter Electrical Specifications (T_{AMB}= 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 2dB)	STOPBANDS (MHz)				VSWR (:1)		
		Loss > 20dB		Loss > 40dB		Passband		Stopband
Fc	F1 - F2	F3	F4	F5	F6	Typ.	Max.	Typ.
73	63 - 85	45	105	40	110 - 550	1.2	1.6	18

Typical Frequency Response



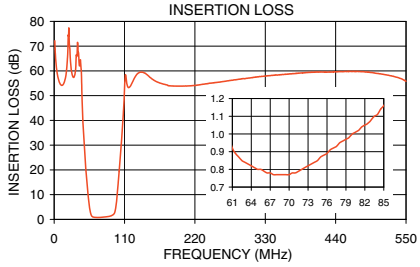
Functional Schematic



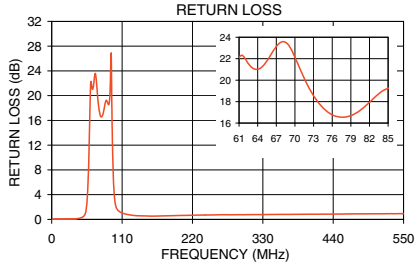
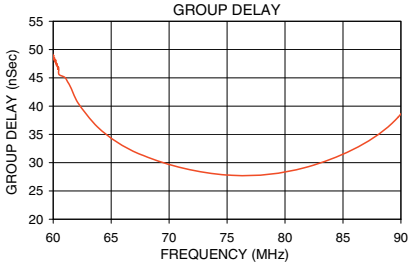
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB) $\bar{x}$	Insertion Loss (dB) σ	Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
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

BPF-C73+
INSERTION LOSS



BPF-C73+
RETURN LOSS



BPF-C73+
GROUP DELAY