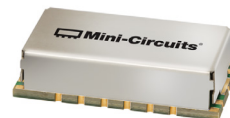


Surface Mount Bandpass Filter

BPF-F184+

50Ω 154.32 to 214.32 MHz



Generic photo used for illustration purposes only
CASE STYLE: HP1156

The Big Deal

- Broad bandwidth
- High Rejection
- Good VSWR
- Miniature shielded package

Product Overview

BPF-F184+ is a 50Ω bandpass filter in a shielded package fabricated using SMT technology. This bandpass filter covers from 154.32 to 214.32 MHz. This is broad filter and finds extensive application in television networks.

Key Features

Feature	Advantages
Low insertion loss	Broad bandwidth and it can be used in television networks.
Good rejection	This enables the filter attenuate spurious signals and reject harmonics for broad frequency band
Shielded package	The small surface mount package enables the BPF-F184+ to used in compact design

Notes

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Surface Mount Bandpass Filter

50Ω 154.32 to 214.32 MHz

BPF-F184+



Features

- Broad bandwidth
- High rejection
- Miniature shielded package

Generic photo used for illustration purposes only
CASE STYLE: HP1156

Applications

- Digital television networks
- Biomedical telemetry devise
- Wireless microphone
- Test and measurement

Electrical Specifications at 25°C

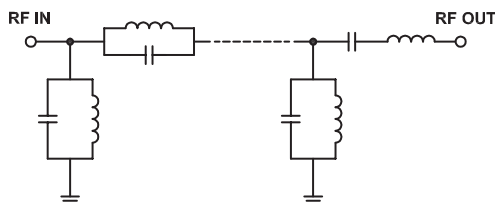
Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	—	—	184	—	MHz
	Insertion Loss	F1-F2	—	1.90	3.00	dB
	VSWR	F1-F2	—	1.43	1.92	:1
Stop Band, Lower	Insertion Loss	DC-F3	20	30	—	dB
	VSWR	DC-F3	—	20	—	:1
Stop Band, Upper	Insertion Loss	F4-F5	20	27	—	dB
	VSWR	F4-F5	—	20	—	:1

Maximum Ratings

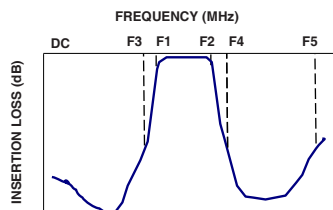
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	2 W

Permanent damage may occur if any of these limits are exceeded.

Functional Schematic



Typical Frequency Response

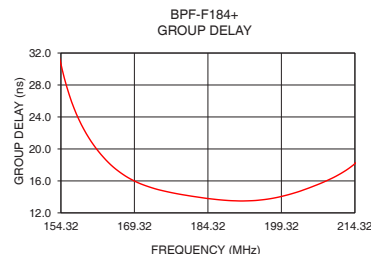
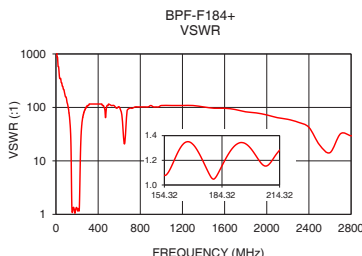
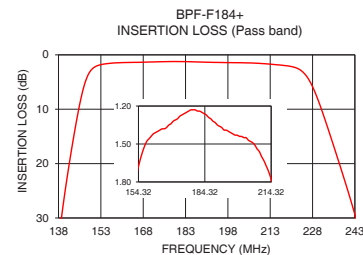
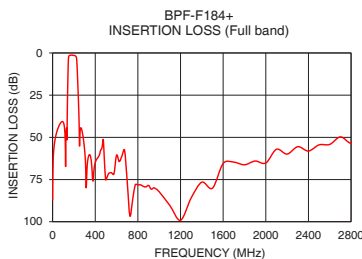


Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1.00	77.68	1737.18	154.32	30.64
50.00	44.73	289.53	155.00	28.90
100.00	41.04	144.77	156.00	26.81
139.00	30.13	32.18	158.00	23.67
140.00	26.26	28.49	160.00	21.41
141.00	22.71	24.48	164.00	18.31
142.00	19.38	20.45	168.00	16.42
145.00	10.40	8.81	173.00	15.12
149.00	3.20	2.02	178.00	14.40
154.32	1.68	1.08	184.00	13.82
184.00	1.26	1.15	188.00	13.57
214.32	1.78	1.28	193.00	13.52
225.00	3.38	2.45	198.00	13.88
233.00	12.82	15.53	202.00	14.50
238.00	20.82	29.96	205.00	15.13
242.00	27.56	40.41	208.00	15.87
244.00	31.21	45.72	210.00	16.44
500.00	75.22	115.81	212.00	17.13
1800.00	66.26	82.73	214.00	17.99
2800.00	53.53	29.46	214.32	18.17

+RoHS Compliant

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



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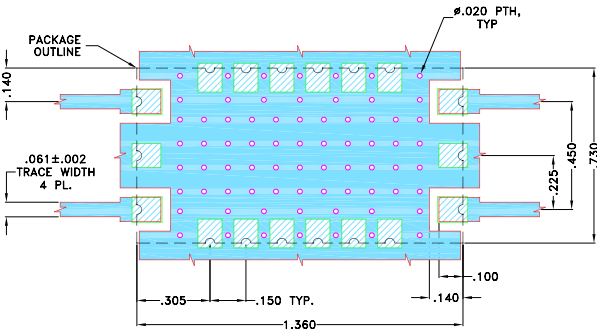
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Pad Connections

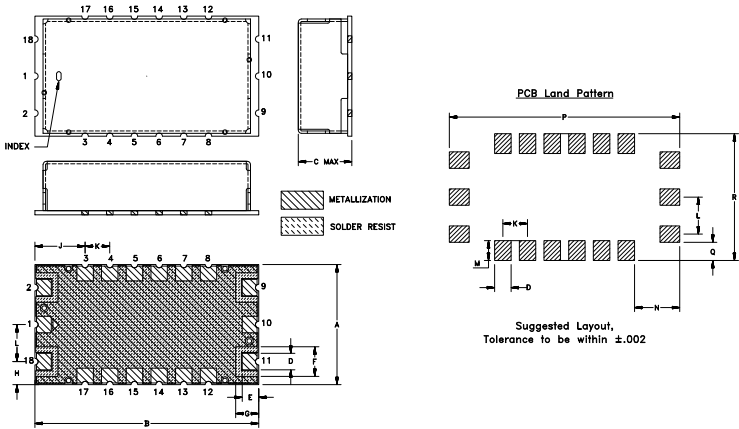
INPUT	2
OUTPUT	11
GROUND	1,3,4,5,6,7,8,10,12,13,14,15,16,17
NO CONNECTION	9,18

Demo Board MCL P/N: TB-695+
Suggested PCB Layout (PL-418)



- NOTES:
- TRACE WIDTH IS SHOWN FOR OAK-602, WITH DIELECTRIC THICKNESS .022" ± .0015". 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 SOLDERMASK

Outline Drawing



Outline Dimensions (inch mm)

A	B	C	D	E	F	G	H	J
.730	1.360	.350	.100	.100	.180	.140	.140	.305
18.54	34.54	8.89	2.54	2.54	4.57	3.56	3.56	7.75
K	L	M	N	P	Q	R		Wt.
.150	.225	.120	.275	1.400	.110	.770		grams
3.81	5.72	3.05	6.99	35.56	2.79	19.56		6.0

Note: Please refer to case style drawing for details

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