

Surface Mount Bandpass Filter

BPF-B177+

50Ω 170 to 185 MHz

Maximum Ratings

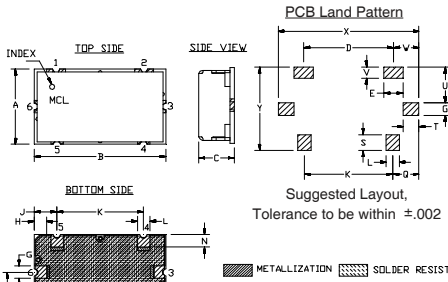
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

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

Pin Connections

INPUT	1
OUTPUT	2
GROUND	3, 4, 5, 6

Outline Drawing

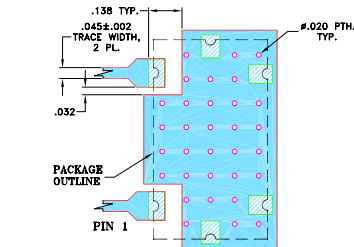


Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M
.472"	.826"	.220"	.551"	.118"	.047"	.078"	.076"	.142"	.543"	.078"	.236"
11.99	20.98	5.59	14.00	3.00	1.19	1.98	1.92	3.61	13.79	1.98	5.99
N	P	Q	S	T	U	V	X	Y			wt
.079"	.138"	.162"	.098"	.096"	.217"	.067"	.157"	.866"	.512"		grams
2.01	3.51	4.11	2.49	2.44	5.51	1.70	3.99	22.00	13.00		6.0

Note: Please refer to case style drawing for details

Demo Board MCL P/N: TB-400+ Suggested PCB Layout (PL-247)



- NOTES:
- 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.
 - 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

Features

- Excellent rejection
- Good VSWR, 1.3:1 typ. @ Passband

Applications

- Receivers / Transmitters
- Base station (CDMA 2000)



Generic photo used for illustration purposes only
CASE STYLE: HZ1198

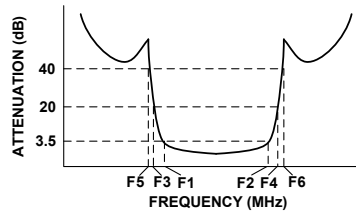
+RoHS Compliant

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

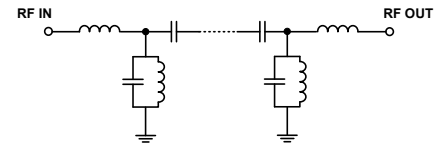
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 3.5dB) F1 - F2	STOPBANDS (MHz)				VSWR (:1)	
		Loss > 20dB		Loss > 40dB		Passband Max.	Stopband Typ.
		F3	F4	F5	F6		
177	170 - 185	150	210	135	240 - 2000	1.7	30

Typical Frequency Response

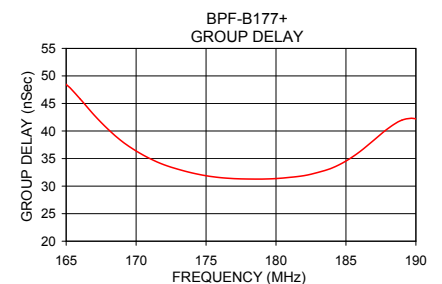
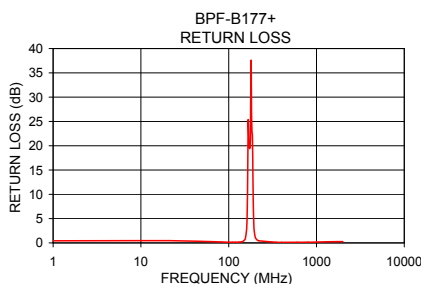
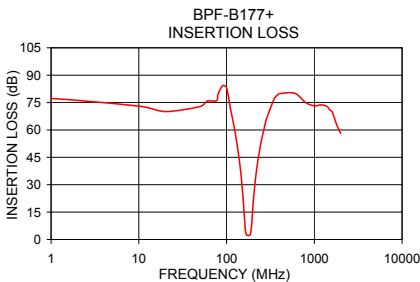


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	\bar{x}	σ			
1.0	77.26	3.26	0.41	165.0	48.45
135.0	48.61	0.42	0.18	167.0	42.89
150.0	29.67	0.56	0.49	169.0	38.11
159.0	13.44	0.72	2.20	170.0	36.38
163.0	6.08	0.50	7.72	171.0	34.99
170.0	2.42	0.04	20.55	172.0	33.87
177.0	2.17	0.01	21.80	173.0	33.06
185.0	2.46	0.05	22.54	174.0	32.39
191.0	5.06	0.57	7.07	175.0	31.89
194.0	9.27	0.91	3.23	176.0	31.55
199.0	17.13	0.89	1.44	177.0	31.35
210.0	30.18	0.62	0.66	179.0	31.28
240.0	50.00	0.42	0.29	181.0	31.59
400.0	79.86	2.19	0.12	183.0	32.48
900.0	74.08	1.98	0.16	185.0	34.54
1200.0	73.73	1.09	0.21	187.0	38.35
1600.0	69.91	0.85	0.25	188.0	40.44
2000.0	58.16	0.52	0.27	190.0	42.22



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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