

Bandpass Filter

Features

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

Applications

- Receivers / Transmitters
- Base station (CDMA 2000)

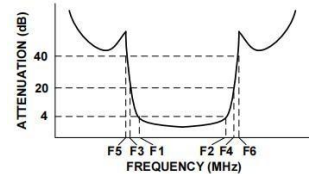
HT-BPF-B177+



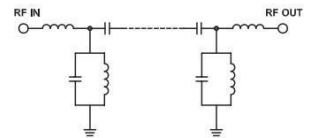
50Ω 170 to 185 MHz

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 4dB)	STOPBAND (MHz)				VSWR(:1)	
		(Loss > 20dB)		(Loss > 40dB)		Passband Max.	Stopband Typ.
Fc	F1 - F2	F3	F4	F5	F6		
177	170-185	150	210	135	240-2000	1.7	30

Typical Frequency Response



Functional Schematic



Pin Connections

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

Maximum Ratings

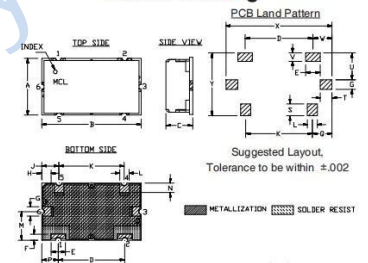
Operating Temperature -40°C to 85°C

Storage Temperature -55°C to 100°C

RF Power Input* 0.5W max.

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

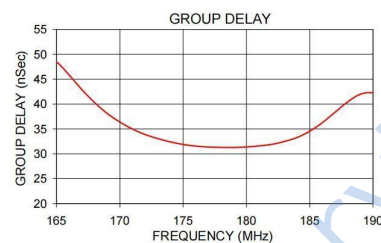
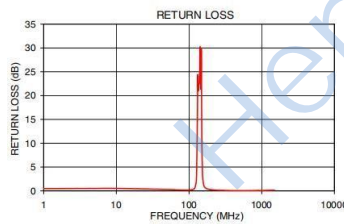
Outline Drawing



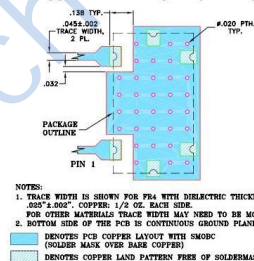
Outline Dimensions: Unit (mm)

A	11.99	B	20.98	C	5.59
D	14	E	3	F	1.19
G	1.98	H	1.92	J	3.61
K	13.79	L	1.98	M	5.99
N	2.01	P	3.51	Q	4.11
S	2.49	T	2.44	U	5.51
V	1.70	W	3.99	X	22
WT		Y	6.0	13	

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	α	σ			
1	77.26	3.26	0.41	165	48.45
135	48.61	0.42	0.18	167	42.89
150	29.67	0.56	0.49	169	38.11
159	13.44	0.72	2.20	170	36.38
163	6.08	0.50	7.72	171	34.99
170	2.42	0.04	20.55	172	33.87
177	2.17	0.01	21.80	173	33.06
185	2.46	0.05	22.54	174	32.39
191	5.06	0.57	7.07	175	31.89
194	9.27	0.91	3.23	176	31.55
199	17.13	0.89	1.44	177	31.35
210	30.18	0.62	0.66	179	31.28
240	50.00	0.42	0.29	181	31.59
400	79.86	2.19	0.1	183	32.48
900	74.08	1.98	0.16	185	34.54
1200	73.73	1.09	0.21	187	38.35
1600	69.91	0.85	0.25	188	40.44
2000	58.16	0.52	0.27	190	42.22



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



- NOTES:
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .003"±. 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 (COLDER MASK OVER DARK COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK