

## Features

- excellent rejection
- flat group delay @ passband
- good VSWR, 1.2:1 typ. @ passband

## Applications

- receivers / transmitters
- CDMA base station

## HT-SXBP-178+



50Ω 170 to 186 MHz

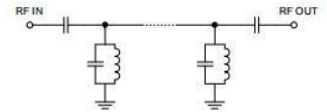
CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 3dB) F1 - F2	STOPBAND (MHz)				VSWR	
		(Loss > 20dB) F3	(Loss > 20dB) F4	(Loss > 40dB) F5	(Loss > 40dB) F6	Passband Typ.	Stopband Typ.
178	170-186	150	210	135	240-2000	1.5	20

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.

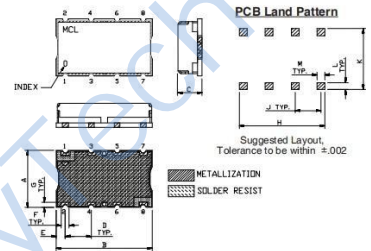
Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	×	σ			
1.0	93.03	6.18	0.42	165.0	50.93
135.0	49.78	0.49	0.17	167.0	44.40
150.0	30.67	0.60	0.45	168.0	42.70
159.0	14.09	0.83	1.92	169.0	38.84
163.0	6.12	0.61	7.06	170.0	37.33
170.0	2.48	0.05	24.26	171.0	35.17
178.0	2.23	0.01	22.44	173.0	33.34
186.0	2.61	0.04	17.52	174.0	32.76
191.0	4.41	0.45	8.71	176.0	31.77
194.0	8.32	0.79	3.64	178.0	31.49
199.0	16.45	0.74	1.46	179.0	31.41
210.0	29.98	0.48	0.64	181.0	31.89
240.0	50.04	0.21	0.28	182.0	31.73
400.0	83.79	1.77	0.11	183.0	32.15
900.0	89.10	5.45	0.16	185.0	33.62
1200.0	76.91	0.98	0.22	186.0	34.56
1600.0	66.71	0.70	0.28	188.0	38.47
2000.0	60.95	1.70	0.32	190.0	43.45

## Functional Schematic



INPUT	1
OUTPUT	8
GROUND	2,3,4,5,6,7

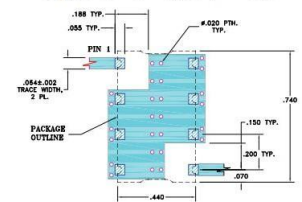
## Outline Drawing



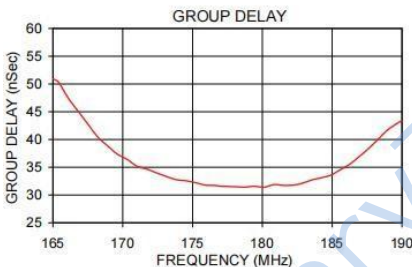
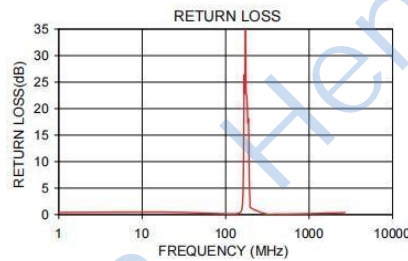
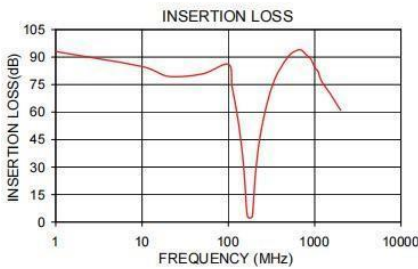
## Outline Dimensions: Unit (mm)

A	11.18	D	5.08	G	1.02
B	18.80	E	1.78	H	16.76
C	6.86	F	1.52	J	5.08
L	1.40	M	1.52	K	11.94
wt	3.0				

Demo Board MCL P/N: TB-368  
Suggested PCB Layout (PL-230)



- NOTE:
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .005"±.0005" 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 SMDSC (SOLDER MASK OVER BARE COPPER)
  - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK



## Typical Frequency Response

