

HT-SXBP-404+



50Ω 398 to 410 MHz

Features

- Flat group delay over passband
- High rejection, (50 dB typical)
- Shielded case
- Aqueous washable

Applications

- Test equipments
- Receivers / transmitters
- Harmonic rejection
- Military

Electrical Specifications at 25°C

Parameter		F#	Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	-	-	-	404	-	MHz
	Insertion Loss	F1-F2	398-410	-	4.1	5.5	dB
	VSWR	F1-F2	398-410	-	1.5	2.0	1
Stop Band, Lower	Insertion Loss	DC-F3	DC-370	20	31	-	dB
	VSWR	DC-F3	DC-370	-	24	-	1
Stop Band, Upper	Insertion Loss	F4-F5	445-4500	20	32	-	dB
	VSWR	F4-F5	445-4500	-	19	-	1

Maximum Ratings

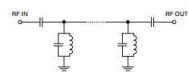
Operating Temperature -40°C to 85°C

Storage Temperature -55°C to 100°C

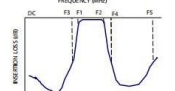
RF Power Input* 0.25W max.

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

Functional Schematic



Typical Frequency Response



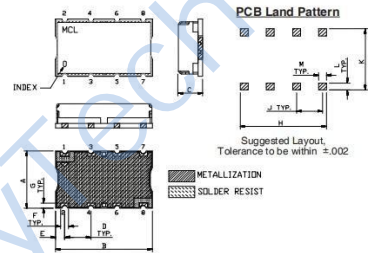
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1.0	83.12	133.63	398.00	28.98
326.0	67.26	108.58	399.00	28.55
350.0	50.91	66.82	400.00	28.22
370.0	32.52	25.94	401.00	27.95
379.0	20.75	10.25	402.00	27.73
386.0	9.82	2.5	402.50	27.64
393.0	4.96	1.58	403.00	27.56
398.0	4.12	1.50	403.50	27.48
404.0	3.69	1.16	404.00	27.42
410.0	3.84	1.09	404.50	27.36
420.0	6.24	2.26	405.00	27.31
426.0	12.13	5.66	405.50	27.29
445.0	32.95	25.94	406.00	27.27
500.0	62.04	78.97	406.50	27.26
700.0	85.57	124.09	407.00	27.27
1000.0	79.97	86.86	407.50	27.29
2000.0	64.54	59.91	408.00	27.33
3000.0	41.90	40.41	408.50	27.39
4000.0	44.13	26.74	409.00	27.46
4500.0	45.71	24.48	410.00	27.66

Pad Connections

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

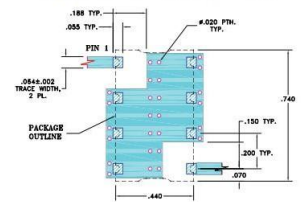
Outline Drawing



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"±.005" 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 SMDs (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

