

Features

- Flat group delay over passband
- Good VSWR, 1.35:1 typical in passband
- Sharp insertion loss roll-off
- High rejection, (64 dB typical)
- Shielded case
- Aqueous washable

Applications

- Harmonic Rejection
- Transmitters / Receivers
- Military

HT-SXBP-310+



50Ω 300 to 320 MHz

Electrical Specifications at 25°C

Parameter		F#	Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	-	-	-	310	-	MHz
	Insertion Loss	F1-F2	300-320	-	4.3	5.5	dB
	VSWR	F1-F2	300-320	-	1.35	1.8	1
Stop Band, Lower	Insertion Loss	DC-F3	DC-280	20	30	-	dB
	VSWR	DC-F3	DC-280	-	25	-	1
Stop Band, Upper	Insertion Loss	F4-F5	342-2250	20	30	-	dB
	VSWR	F4-F5	342-2250	-	20	-	1

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1.0	65.44	69.49	300.0	39.14
146.0	74.81	108.58	301.0	37.36
260.0	51.84	86.86	302.0	35.79
280.0	31.19	27.59	303.0	34.58
288.0	18.55	10.13	304.0	33.63
292.0	10.95	4.12	305.0	32.89
294.0	7.59	2.32	306.0	32.28
300.0	3.89	1.34	307.0	31.85
305.0	3.39	1.21	308.0	31.48
310.0	3.31	1.21	310.0	31.11
320.0	4.24	1.25	311.0	31.06
326.0	9.58	3.65	312.0	31.19
330.0	15.90	7.70	313.0	31.39
342.0	31.20	23.18	314.0	31.67
370.0	51.85	57.19	315.0	32.16
500.0	74.60	157.93	316.0	32.81
1000.0	83.03	102.19	317.0	33.66
1500.0	78.06	69.49	318.0	34.75
2000.0	60.78	56.04	319.0	35.97
2250.0	54.90	51.86	320.0	37.24

Maximum Ratings

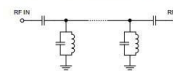
Operating Temperature -40°C to 85°C

Storage Temperature -55°C to 100°C

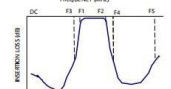
RF Power Input* 0.4W max.

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

Functional Schematic



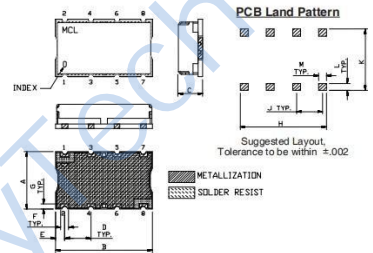
Typical Frequency Response



Pad Connections

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

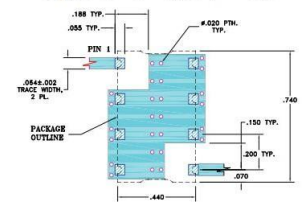
Outline Drawing



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" (128µM) COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 2. BOTTOM SIDE OF THE PCB IS CONTIGUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMDSC (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

