

Bandpass Filter

Features

- high rejection
- good VSWR, 1.3:1 typ @ passband
- aqueous washable

Applications

- radio link
- receivers / transmitters
- professional mobile radio / public access mobile radio (PMR/ PAMR)

HT-SXBP-150+



50Ω 140 to 160 MHz

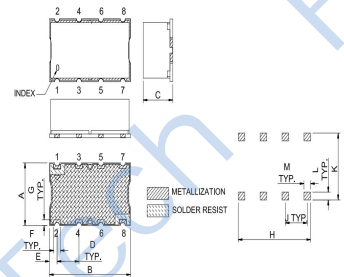
CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 3dB)	STOPBANDS (MHz)				VSWR (:1)		
		(loss > 20 dB)	(loss > 40 dB)	(loss > 20 dB)	(loss > 40 dB)	Passband Typ.	Max.	Stopband Typ.
150	140-160	120	190	100	250-2400	1.3	1.8	20

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	\bar{x}	σ			
1.0	83.96	1.58	0.37	135.0	47.94
50.0	78.09	1.11	0.31	138.0	43.87
100.0	54.50	0.68	0.17	139.0	40.79
120.0	29.52	0.89	0.40	140.0	37.89
130.0	11.22	1.23	2.35	141.0	35.78
135.0	3.38	0.59	16.16	142.0	34.12
140.0	1.99	0.06	18.26	144.0	31.61
150.0	1.69	0.01	28.35	146.0	29.70
160.0	2.05	0.04	17.98	147.5	29.05
165.0	3.19	0.36	9.45	148.0	28.76
170.0	8.77	0.99	2.53	150.0	27.97
175.0	15.71	0.87	1.21	152.0	27.42
184.0	25.51	0.60	0.64	154.0	27.86
190.0	30.53	0.49	0.49	155.0	27.58
250.0	56.82	0.34	0.18	156.0	27.72
1000.0	88.44	3.18	0.15	158.0	27.64
2000.0	61.58	0.28	0.28	160.0	28.49
2400.0	55.81	0.21	0.29	165.0	36.48

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.	

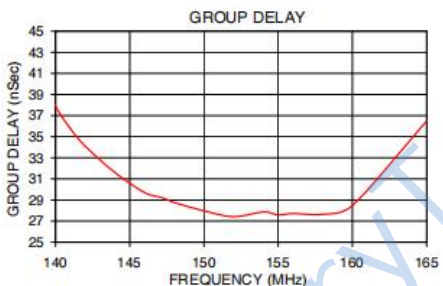
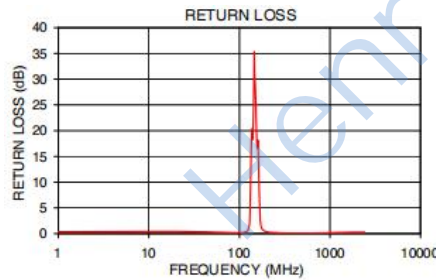
RF IN	1
RF OUT	8
GROUND	2, 3, 4, 5, 6, 7

Outline Drawing

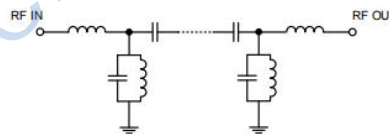


Suggested Layout Tolerance to be within ± 0.5

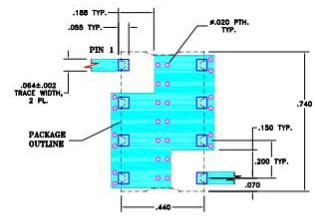
A	11.18	G	1.02
B	18.80	H	16.76
C	6.86	J	5.08
D	5.08	K	11.94
E	1.78	L	1.40
F	1.52	M	1.52
WT	3g		



Functional Schematic



Suggested PCB Layout



- NOTE:
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: 0.0075" (0.19mm). COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTHS MAY NEED TO BE MODIFIED.
 2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BASE COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK