

# Bandpass Filter

## HT-SXBP-1200+



50Ω 800 to 1800 MHz

### Features

- wideband, 800 to 1800 MHz
- flat group delay @ passband, 1 nsec typ.
- shielded case
- aqueous washable

### Applications

- receivers/transmitters
- wireless communication systems
- harmonic rejection

### Bandpass Filter Electrical Specifications (T<sub>AMB</sub>= 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 5.5dB)	STOPBAND (MHz)				VSWR		
		(Loss > 20dB)		(Loss > 40dB)		Passband		Stopband
		F3	F4	F5	F6	Typ.	Max.	Typ.
Fc	F1 - F2							
1200	800-1800	535	2220	530	2250-5000	1.5	2.1	20

### Maximum Ratings

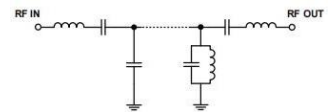
Operating Temperature -40°C to 85°C

Storage Temperature -55°C to 100°C

RF Power Input\* 0.5W max.

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

### Functional Schematic



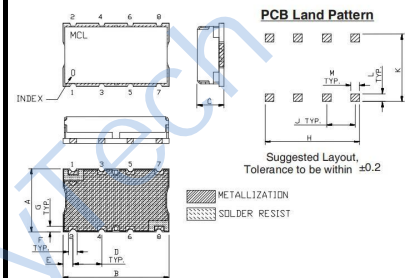
### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	x	σ			
1	72.93	0.47	0.00	800	1.66
530	38.97	2.80	0.49	850	1.49
535	34.94	2.93	0.51	900	1.37
570	15.37	0.93	0.88	950	1.29
600	7.18	0.56	2.18	1000	1.23
620	3.81	0.35	4.23	1050	1.19
650	1.61	0.13	8.35	1150	1.14
800	0.67	0.02	17.35	1200	1.13
1000	0.77	0.01	13.11	1250	1.13
1200	0.79	0.01	13.92	1300	1.13
1500	0.97	0.04	14.26	1350	1.14
1800	1.23	0.06	25.74	1400	1.15
1970	3.72	0.83	6.44	1500	1.19
2030	8.79	1.47	3.08	1600	1.27
2100	16.46	1.72	1.67	1650	1.32
2220	32.60	2.60	1.02	1700	1.39
2250	36.64	3.50	0.96	1750	1.48
5000	32.11	1.21	0.98	1800	1.63

### Pad Connections

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

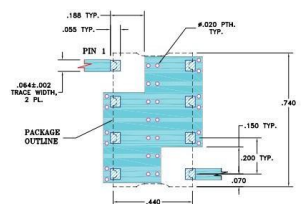
### Outline Drawing



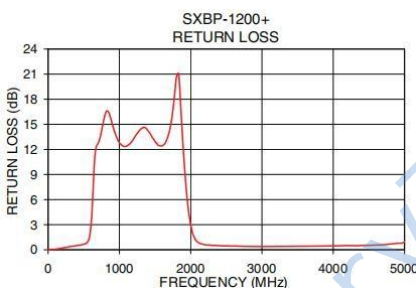
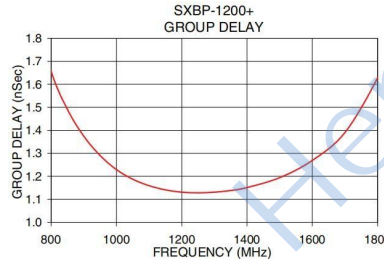
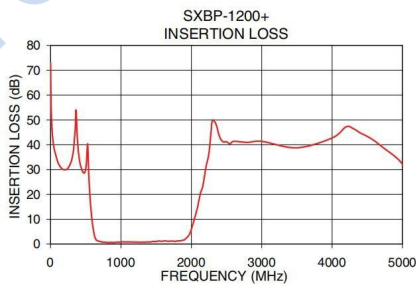
### Outline Dimensions: Unit (mm)

A	11.18	D	5.08	G	1.02
B	18.80	E	1.78	H	16.76
C	4.83	F	1.52	J	5.08
L	1.40	M	1.52	K	11.94
wt	3.0g				

### Suggested PCB Layout



- NOTE:
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .005"±.002". 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.
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### Typical Frequency Response

