

# Bandpass Filter

## HT-SXBP-1430+



50Ω 950 to 2150 MHz

### Features

- wideband, 950 to 2150 MHz
- flat group delay @ passband, 1 nsec typ.
- good VSWR, 1.3:1 typ @ passband
- aqueous washable

### Applications

- L-band satellite
- receivers/transmitters
- wireless communication systems

### 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 Typ.	Max.	Stopband Typ.
		F3	F4	F5	F6			
Fc	F1 - F2	F3	F4	F5	F6	Typ.	Max.	Typ.
1430	950-2150	575	2850	570	2850-5000	1.3	1.9	20

### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	x	σ			
5	56.78	0.07	0.01	900	1.39
570	31.48	0.81	0.72	950	1.27
575	28.99	0.64	0.72	1000	1.21
600	21.53	0.49	0.81	1100	1.14
650	10.23	0.41	1.51	1200	0.97
675	6.25	0.37	2.69	1300	1.04
700	3.19	0.28	5.26	1400	0.96
750	1.04	0.07	16.69	1430	0.96
950	0.56	0.02	20.73	1450	0.93
1430	0.60	0.03	18.82	1500	0.94
2150	0.97	0.02	24.15	1600	0.87
2425	1.65	0.06	20.56	1700	0.92
2500	2.50	0.28	17.51	1800	0.97
2575	6.28	0.86	5.39	1900	0.98
2650	13.27	1.06	2.06	2000	1.00
2800	29.07	1.38	1.11	2100	1.12
2850	36.43	1.93	1.05	2150	1.10
5000	38.05	1.34	0.63	2200	1.09

### Maximum Ratings

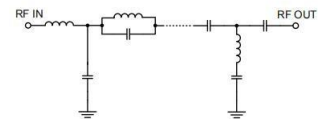
Operating Temperature -40°C to 85°C

Storage Temperature -55°C to 100°C

RF Power Input\* 0.5W max.

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

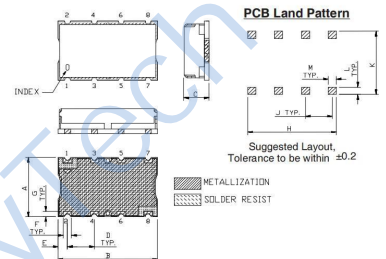
### Functional Schematic



### Pad Connections

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

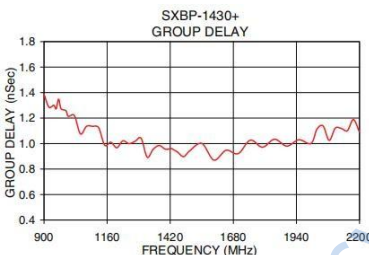
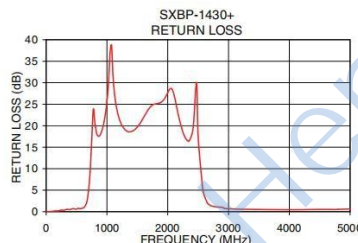
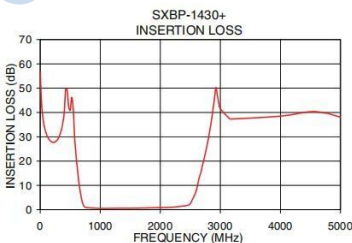
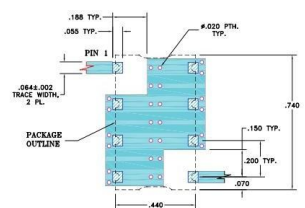
### Outline Drawing



### 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					3.0

### Suggested PCB Layout



### Typical Frequency Response

