

Features

- Wideband, 950 to 2150 MHz
- Flat group delay @ passband, 0.6 nsec typ.
- Good VSWR, 1.3:1 typ @ passband
- Aqueous washable

Applications

- L-band
- Receivers/ Transmitters
- Wireless communication system

HT-SXBP-1430-75+



75Ω 950 to 2150 MHz

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.

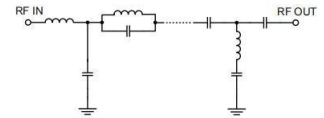
Bandpass Filter Electrical Specifications (T_{AMB}= 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 5.5dB)	STOPBAND (MHz)				VSWR		
		(Loss > 20dB)		(Loss > 40dB)		Passband		Stopband Typ.
		F3	F4	F5	F6	Typ.	Max.	
Fc	F1 - F2	F3	F4	F5	F6	Typ.	Max.	Typ.
1430	950-2150	575	2950	530	3000-5000	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	50.63	0.39	0.01	900	0.78
530	35.18	2.03	0.77	950	0.67
540	29.53	1.19	0.77	1000	0.61
580	17.63	0.45	0.94	1100	0.52
630	9.50	0.26	1.47	1200	0.46
680	4.50	0.14	3.30	1300	0.42
725	2.17	0.06	6.37	1400	0.41
780	1.15	0.04	10.96	1430	0.41
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

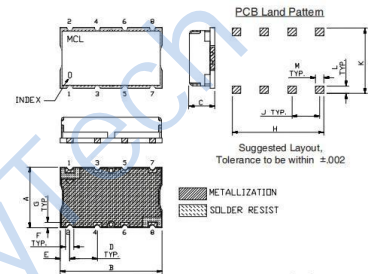
Functional Schematic



Pad Connections

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

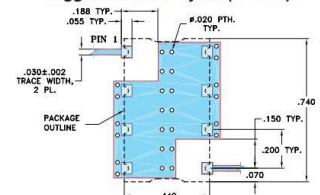
Outline Drawing



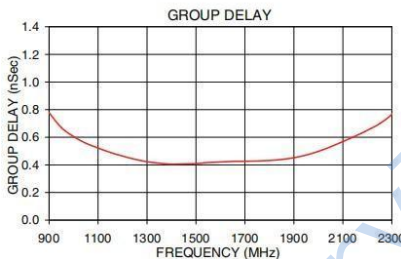
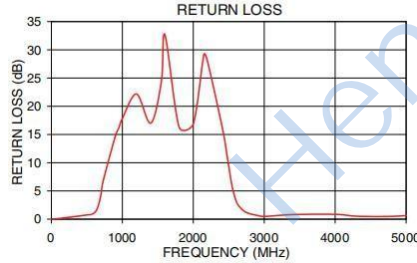
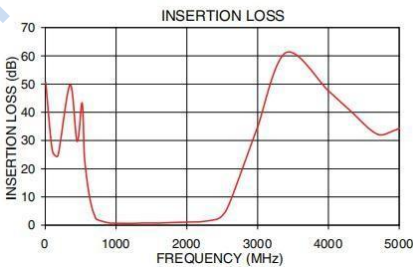
Outline Dimensions: Unit (mm)

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				

Demo Board MCL P/N: TB-683+ Suggested PCB Layout (PL-281)



- NOTE:
1. TRACE WIDTH IS SHOWN FOR ROGERS RO4030B WITH DIELECTRIC THICKNESS .030"±.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.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK



Typical Frequency Response

