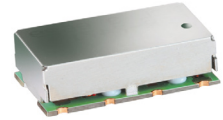


Surface Mount Bandpass Filter

SXBP-1430+

50Ω 950 to 2150 MHz



CASE STYLE: HF1317

Maximum Ratings

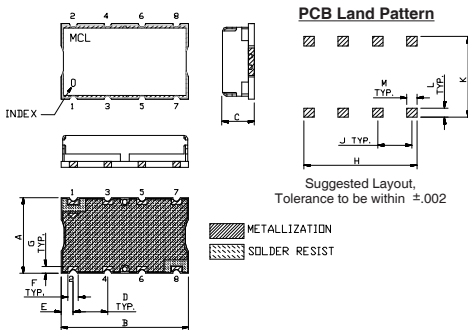
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

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

Pin Connections

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

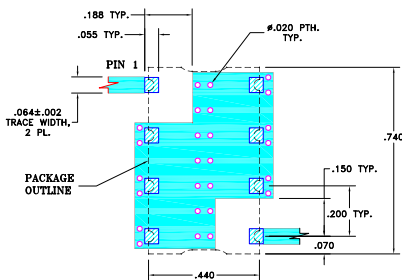
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	wt.
.44	.74	.19	.200	.07	.060	11.18	18.80	4.83	5.08	1.78	1.52	
												grams
.040	.660	.200	.470	.055	.060	1.02	16.76	5.08	11.94	1.40	1.52	3.0

Demo Board MCL P/N: TB-368 Suggested PCB Layout (PL-230)



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

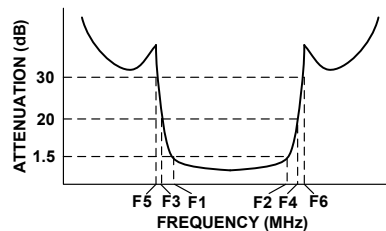
+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

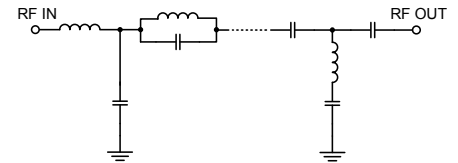
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 1.5dB)	STOPBANDS (MHz)				VSWR (:1)		
		Loss > 20dB	Loss 30dB Typ.	Passband Typ.	Passband Max.	Stopband Typ.		
F _c	F ₁ - F ₂	F ₃	F ₄	F ₅	F ₆			
1430	950 - 2150	575	2850	570	2850 - 5000	1.3	1.9	20

Typical Frequency Response

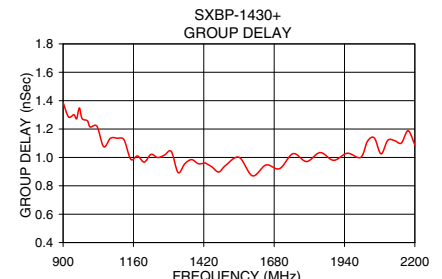
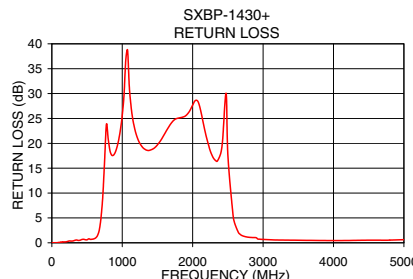
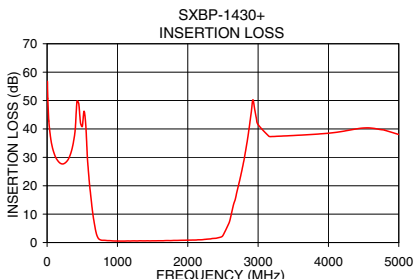


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	\bar{x}	σ			
5.0	56.78	0.07	0.01	900.0	1.39
570.0	31.48	0.81	0.72	950.0	1.27
575.0	28.99	0.64	0.72	1000.0	1.21
600.0	21.53	0.49	0.81	1100.0	1.14
650.0	10.23	0.41	1.51	1200.0	0.97
675.0	6.25	0.37	2.69	1300.0	1.04
700.0	3.19	0.28	5.26	1400.0	0.96
750.0	1.04	0.07	16.69	1430.0	0.96
950.0	0.56	0.02	20.73	1450.0	0.93
1430.0	0.60	0.03	18.82	1500.0	0.94
2150.0	0.97	0.02	24.15	1600.0	0.87
2425.0	1.65	0.06	20.56	1700.0	0.92
2500.0	2.50	0.28	17.51	1800.0	0.97
2575.0	6.28	0.86	5.39	1900.0	0.98
2650.0	13.27	1.06	2.06	2000.0	1.00
2800.0	29.07	1.38	1.11	2100.0	1.12
2850.0	36.43	1.93	1.05	2150.0	1.10
5000.0	38.05	1.34	0.63	2200.0	1.09



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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