

Surface Mount Bandpass Filter

SXBP-1200+

50Ω 800 to 1800 MHz

Maximum Ratings

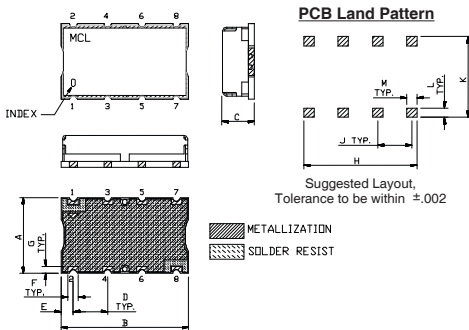
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

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

Pin Connections

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

Outline Drawing

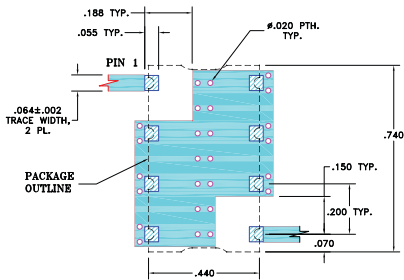


Outline Dimensions (inch/mm)

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

Note: Please refer to case style drawing for details

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



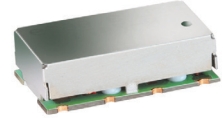
- NOTE:
- TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .025"±.002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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



Generic photo used for illustration purposes only
CASE STYLE: HF1317

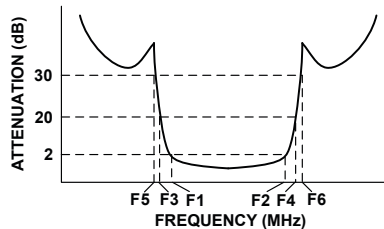
+RoHS Compliant

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

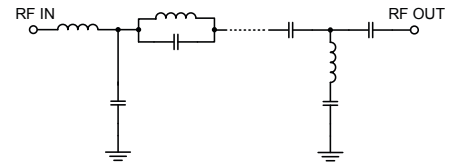
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 2dB)	STOPBANDS (MHz)				VSWR (:1)		
		Loss > 20dB		Loss 30dB Typ.		Passband		Stopband
F _c	F ₁ - F ₂	F ₃	F ₄	F ₅	F ₆	Typ.	Max.	Typ.
1200	800 - 1800	535	2220	530	2250 - 5000	1.5	2.1	20

Typical Frequency Response

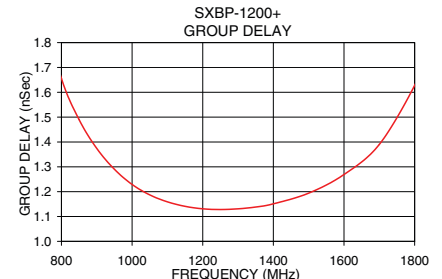
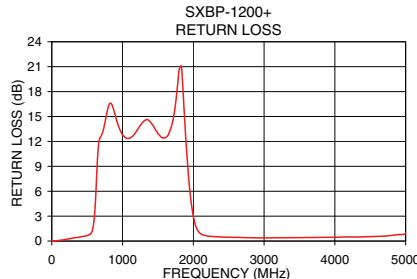
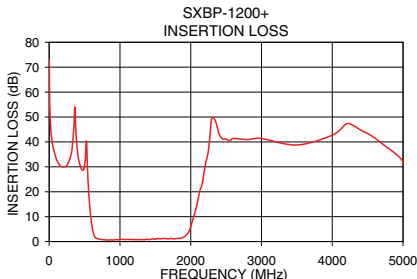


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	\bar{x}	σ			
1.0	72.93	0.47	0.00	800.0	1.66
530.0	38.97	2.80	0.49	850.0	1.49
535.0	34.49	2.93	0.51	900.0	1.37
570.0	15.37	0.93	0.88	950.0	1.29
600.0	7.18	0.56	2.18	1000.0	1.23
620.0	3.81	0.35	4.23	1050.0	1.19
650.0	1.61	0.13	8.35	1150.0	1.14
800.0	0.67	0.02	17.38	1200.0	1.13
1000.0	0.77	0.01	13.11	1250.0	1.13
1200.0	0.79	0.01	13.92	1300.0	1.13
1500.0	0.97	0.04	14.26	1350.0	1.14
1800.0	1.23	0.06	25.74	1400.0	1.15
1970.0	3.72	0.83	6.44	1500.0	1.19
2030.0	8.79	1.47	3.08	1600.0	1.27
2100.0	16.46	1.72	1.67	1650.0	1.32
2220.0	32.60	2.60	1.02	1700.0	1.39
2250.0	36.64	3.50	0.96	1750.0	1.48
5000.0	32.11	1.21	0.98	1800.0	1.63



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.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp



www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. B
M174392
EDR-9257U
SXBP-1200+
URJ/RAV
200709
Page 1 of 1