

Bandpass Filter

SXBP-178+

50Ω 170 to 186 MHz

Maximum Ratings

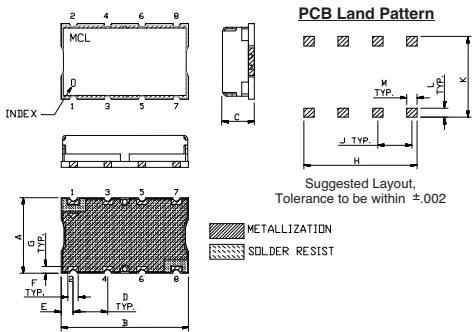
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max

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

Pin Connections

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

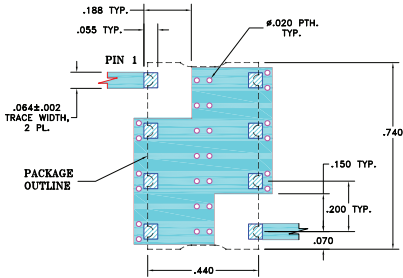
Outline Drawing



Outline Dimensions (inch/mm)

	A	B	C	D	E	F	
	.44	.74	.27	.200	.07	.060	
	11.18	18.80	6.86	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

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



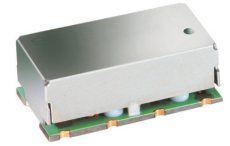
- NOTE:
- TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .025 ± .002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER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

Features

- excellent rejection
- flat group delay @ passband
- good VSWR, 1.2:1 typ. @ passband

Applications

- receivers / transmitters
- CDMA base station



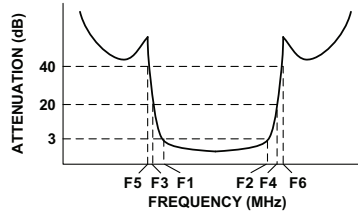
CASE STYLE: HF1139
PRICE: \$15.95 ea. QTY (1-9)

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

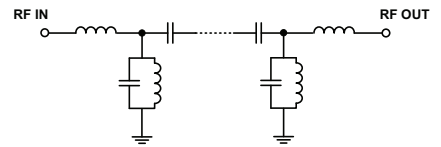
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 3dB) F1 - F2	STOPBANDS (MHz)				VSWR (:1)	
		Loss > 20dB		Loss > 40dB		Passband Max.	Stopband Typ.
		F3	F4	F5	F6		
178	170 - 186	150	210	135	240 - 2000	1.5	20

Typical Frequency Response

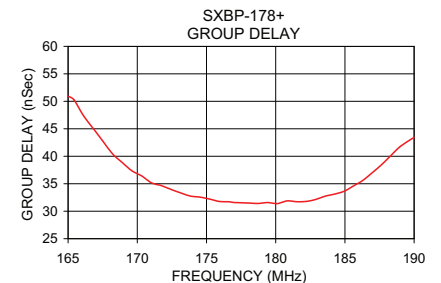
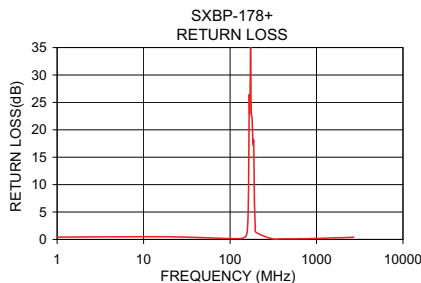
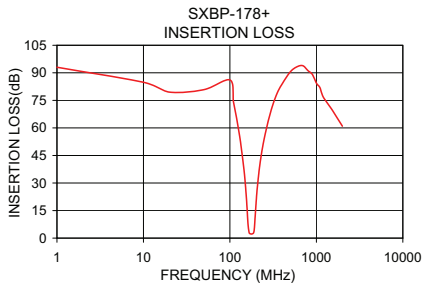


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	\bar{x}	σ			
1.0	93.03	6.18	0.42	165.0	50.93
135.0	49.78	0.49	0.17	167.0	44.46
150.0	30.67	0.60	0.45	168.0	42.70
159.0	14.09	0.83	1.92	169.0	38.84
163.0	6.12	0.61	7.06	170.0	37.33
170.0	2.48	0.05	24.26	171.0	35.17
178.0	2.23	0.01	22.44	173.0	33.34
186.0	2.61	0.04	17.52	174.0	32.76
191.0	4.41	0.45	8.71	176.0	31.77
194.0	8.32	0.79	3.64	178.0	31.49
199.0	16.45	0.74	1.46	179.0	31.41
210.0	29.98	0.48	0.64	181.0	31.89
240.0	50.04	0.21	0.28	182.0	31.73
400.0	83.79	1.77	0.11	183.0	32.14
900.0	89.10	5.45	0.16	185.0	33.62
1200.0	76.91	0.98	0.22	186.0	34.56
1600.0	66.71	0.70	0.28	188.0	38.47
2000.0	60.95	1.70	0.32	190.0	43.45



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

IF/RF MICROWAVE COMPONENTS

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