

Bandpass Filter

BPF-A175+

50Ω 170 to 180 MHz

Maximum Ratings

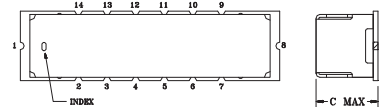
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.5W at 25°C

*Passband rating, derate linearly to 0.25W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

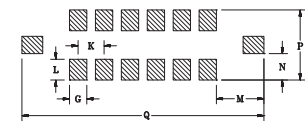
Pin Connections

RF IN	1
RF OUT	8
GROUND	2,3,4,5,6,7,9,10,11,12,13,14

Outline Drawing



PCB Land Pattern



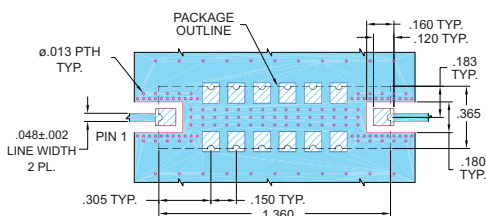
Suggested Layout
Tolerance to be within ±.002

METALLIZATION
 SOLDER RESIST

Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
.365	1.360	.35	.100	.180	.140	.100	.100
9.27	34.54	8.89	2.54	4.57	3.58	2.54	2.54
J	K	L	M	N	P	Q	wt.
.305	.150	.120	.275	.152	.405	1.400	grams
7.75	3.81	3.05	6.99	3.87	10.29	35.65	4.0

Demo Board MCL P/N: TB-363+
Suggested PCB Layout(PL-227)



NOTES:

- 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

- Good VSWR, 1.2:1 typ @ passband
- High stop band rejection

Application

- Military communications
- Harmonic rejection
- Transmitters/receivers



CASE STYLE: HQ1157
PRICE: \$39.95 QTY (1-9)

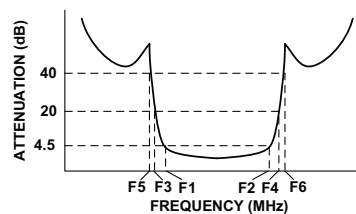
+RoHS Compliant

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

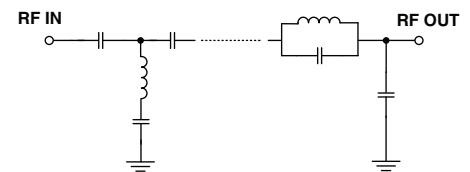
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 4.5dB) F1 - F2	STOPBANDS (MHz)		VSWR (:1)	
		Loss > 20dB F3 F4	Loss > 40dB F5 F6	Passband Max.	Stopband Typ.
175	170 - 180	154 200	144 208 - 1500	1.7	20

Typical Frequency Response

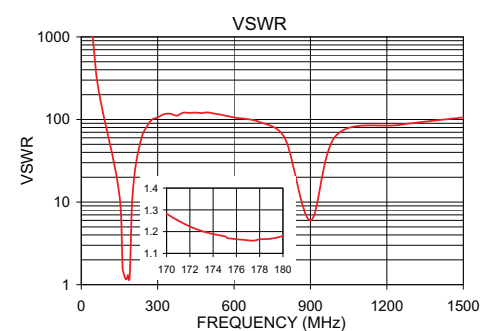
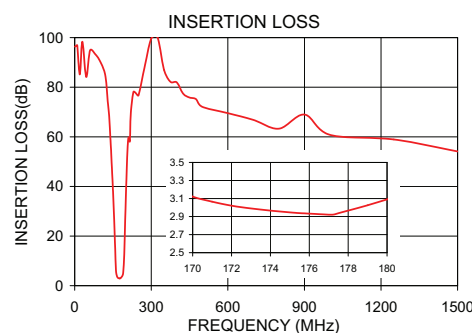


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1	96.37	54029.76
30	98.36	1503.32
80	93.37	145.37
144	51.47	16.37
154	28.15	8.95
170	3.15	1.25
175	3.01	1.17
180	3.16	1.20
190	5.18	1.21
198	27.41	7.59
200	34.40	10.12
208	56.76	20.24
230	78.08	49.56
300	99.64	106.17
400	81.94	120.68
600	69.55	106.04
900	69.00	6.00
1000	60.80	63.67
1500	54.12	106.03



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