

Bandpass Filter

BPF-A175+

50Ω 170 to 180 MHz

Maximum Ratings

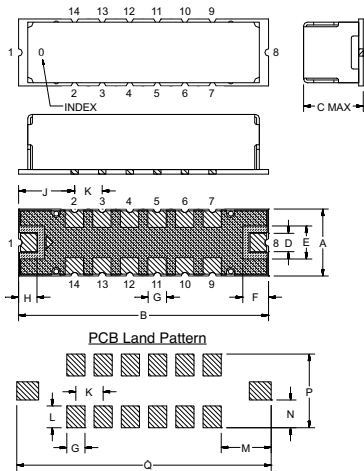
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5*W at 25°C

*Passband rating, derate linearly to 0.25W at 100°C ambient.

Pin Connections

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

Outline Drawing



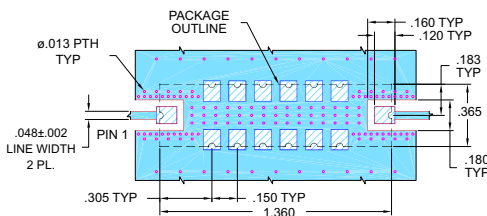
Suggested Layout
Tolerance to be within ±.002

METALLIZATION
 SOLDER RESIST

Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	wt.
.365	1.360	.35	.100	.180	.140	.100	.100	.305	.150	.120	.275	.152	.405	1.400	grams
9.27	34.54	8.89	2.54	4.57	3.58	2.54	2.54	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 @ Pass Band
- High Stop Band Rejection

Application

- Military Communications
- Harmonic Rejection
- Transmitters/Receivers



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

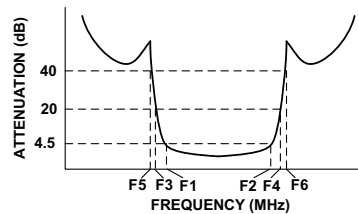
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

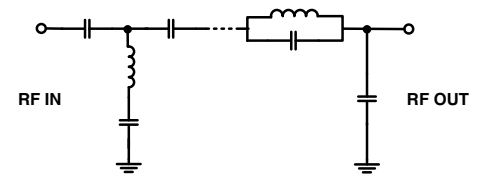
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

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

Typical Frequency Response

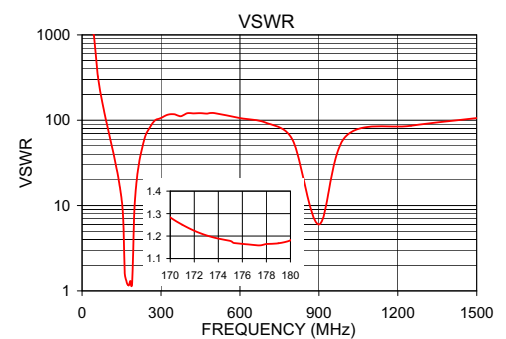
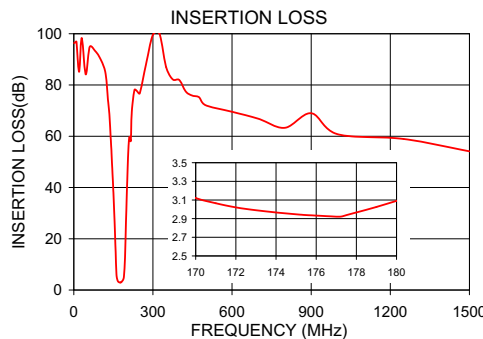


Functional Schematic



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



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



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RF/IF MICROWAVE COMPONENTS

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Page 1 of 1