

Bandpass Filter

BPF-A176+

50Ω 175 to 177 MHz

Maximum Ratings

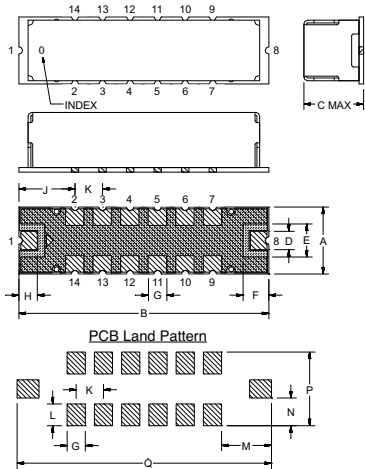
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5*W at 25°C

*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

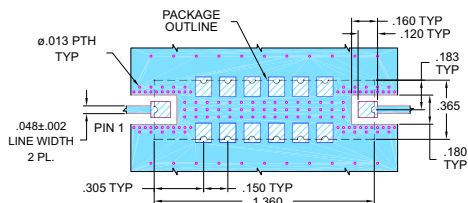
METALLIZATION
SOLDER RESIST

Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
.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

- High Rejection
- Shielded case
- Aqueous washable

Applications

- Military Radio
- Harmonic Rejection
- Transmitters / Receivers



CASE STYLE: HQ1157
PRICE: \$29.95 ea. QTY (1-9)

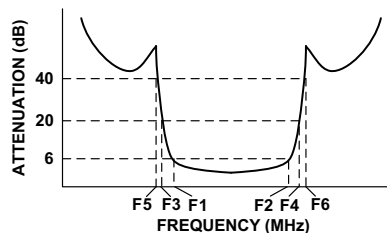
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

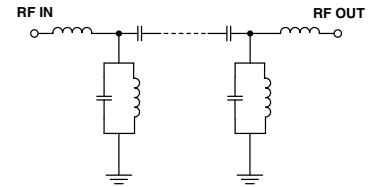
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 6dB)	STOPBANDS (MHz)				VSWR (:1)		
		Loss > 20dB		Loss > 40dB		Passband		Stopband
F _c	F ₁ - F ₂	F ₃	F ₄	F ₅	F ₆	Typ.	Max.	Typ.
176	175 - 177	162	190	155	200 - 2000	1.4	1.7	20

Typical Frequency Response

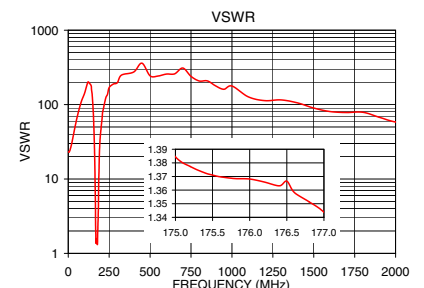


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.0	97.12	23.39
60.0	93.06	76.34
155.0	60.47	62.82
162.0	38.33	18.06
166.0	19.89	4.39
168.5	11.38	1.72
170.0	6.28	1.37
175.0	4.70	1.38
175.5	4.70	1.37
176.0	4.71	1.37
176.5	4.73	1.37
177.0	4.77	1.34
182.5	9.02	2.87
185.0	17.79	5.59
190.0	36.19	21.01
200.0	57.09	46.80
1000.0	89.30	177.89
2000.0	75.29	58.33



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