

# Bandpass Filter

## BPF-A1340+

50Ω 1000 to 1800 MHz

### Maximum Ratings

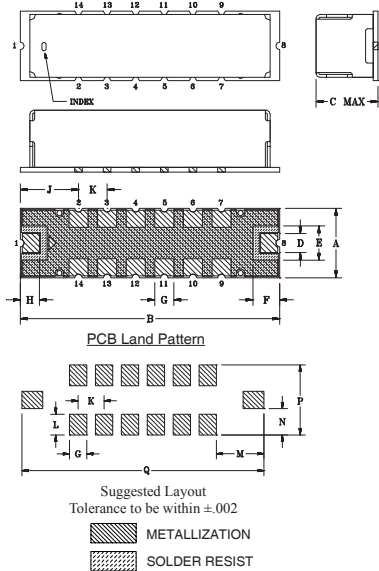
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	1W at 25°C

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

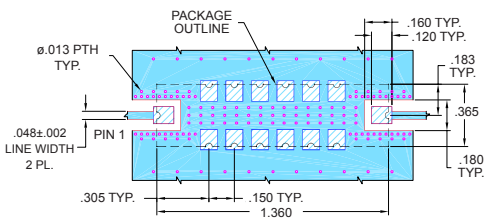
### Outline Drawing



### 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

#### 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](http://www.minicircuits.com/MCLStore/terms.jsp)

### Features

- Good VSWR, 1.4:1 typ @ passband
- High rejection
- Shielded case
- Aqueous washable

### Applications

- Test equipment
- Radio
- Harmonic rejection
- Transmitters/receivers



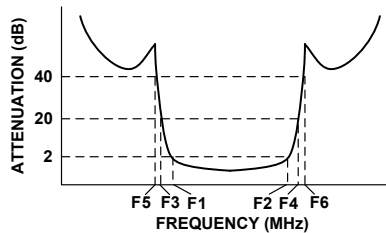
CASE STYLE: HQ1157

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

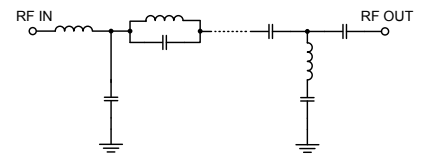
### Bandpass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 2.8dB)	STOPBANDS (MHz)				VSWR (:1)		
		Loss > 20dB		Loss 40dB Typ.		Passband		Stopband
F <sub>c</sub>	F <sub>1</sub> - F <sub>2</sub>	F <sub>3</sub>	F <sub>4</sub>	F <sub>5</sub>	F <sub>6</sub>	Typ.	Max.	Typ.
1340	1000 - 1800	800	2300	750	2400 - 4300	1.4	2.2	20

### Typical Frequency Response



### Functional Schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1	88.02	1737.18
50	64.98	868.59
750	49.66	9.23
800	28.71	4.53
820	13.07	4.99
830	7.77	3.78
860	2.18	1.50
1000	1.04	1.38
1200	0.85	1.24
1340	0.84	1.21
1600	1.08	1.42
1800	1.29	1.26
1950	2.88	2.76
2080	7.23	6.42
2140	14.48	13.70
2300	32.45	22.00
2400	42.07	24.48
4300	44.65	21.46

