# **Bandpass Filter**

## **BPF-A76+**

#### $50\Omega$ 74 to 77 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

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

#### **Pin Connections**

RF IN	1_
RF OUT	8
GROUND	23456791011121314

### · Shielded case · Aqueous washable **Applications**

· High rejection

**Features** 

· Military communications

· Good VSWR, 1.3:1 typ @ passband

- · Harmonic rejection
- Transmitters/receivers

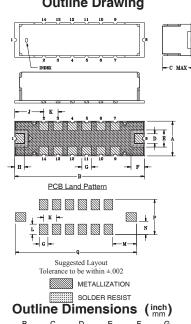
Generic photo used for illustration purposes only

CASE STYLE: HQ1157

#### +RoHS Compliant

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

#### **Outline Drawing**



#### Note: Please refer to case style drawing for details Demo Board MCL P/N: TB-363+ Suggested PCB Layout (PL-227)

.180

4.57

.152

3.86 10.29

.140

3.56

.405 1.400

.100

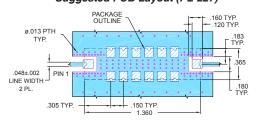
2.54

35.56

.100

2.54 Wt.

grams



#### NOTES:

.365 1.360

9.27 34.54

.305

.150

.35 .100

2.54

.275

6.99

8.89

.120

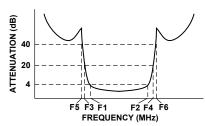
- 1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .025" ± .002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
- 2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

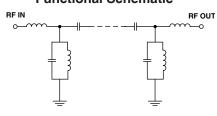
### Bandpass Filter Electrical Specifications (T<sub>AMB</sub>= 25°C)

CENTER FREQ.	PASSBAND (MHz)	STOPBANDS (MHz)			VSWR (:1)			
(MHz)	(Loss < 4dB)	Loss >	> 20dB	Los	s > 40dB	Pass	band	Stopband
Fc	F1 - F2	F3	F4	F5	F6	Тур.	Max.	Тур.
75.5	74 - 77	65	86	60	94 - 1000	1.3	1.8	20

#### **Typical Frequency Response**

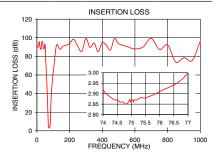


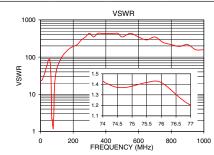
### **Functional Schematic**



#### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
0.5	90.50	24.14
60.0	55.22	66.82
65.0	31.16	20.22
68.0	15.22	2.93
69.0	9.91	2.34
70.0	4.60	1.97
74.0	2.92	1.43
75.0	2.87	1.38
75.5	2.88	1.42
76.0	2.91	1.42
77.0	3.00	1.20
80.0	4.20	1.78
82.0	9.85	3.69
84.0	21.80	10.75
86.0	30.91	16.89
94.0	52.87	36.20
500.0	93.71	347.44
1000.0	96.30	157.93





- Notes
  A. 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.
  B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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