

# Surface Mount Bandpass Filter

## EBPF-166R5-1+

50Ω 108 to 225 MHz

### Features

- Miniature shielded package
- Low insertion loss
- High rejection

CASE STYLE: HE1354

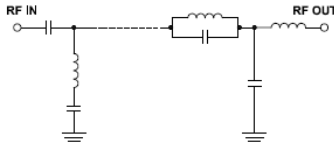
### Electrical Specifications at -40°C to 85°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	F1-F2	108 - 225	—	—	2	dB
		108 - 225	10	12	—	dB
Stop Band, Lower	DC-F3	DC - 30	33	40	—	dB
		@ 70	20	—	—	dB
Stop Band, Upper	F5	@ 375	20	30	—	dB
		F6-F7	35	40	—	dB

### Applications

- Defense/Military
- Military Radio Communications

### Functional Schematic



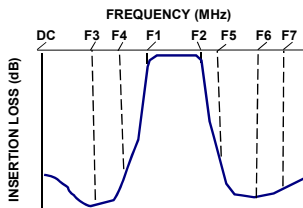
### Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	27 dBm (CW)(Passband)

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

### Typical Performance Data at 25°C

### Typical Frequency Response



### +RoHS Compliant

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

### 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.
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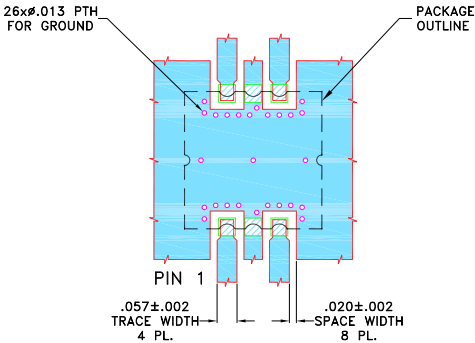
REV.X0  
ECO-0XXXXX  
EBPF-166R5-1+  
EDUXXXX  
URJ  
211229  
Page 1 of 2

Pad Connections

INPUT	1
OUTPUT	6
GROUND	2,5
NOT USED	3,4

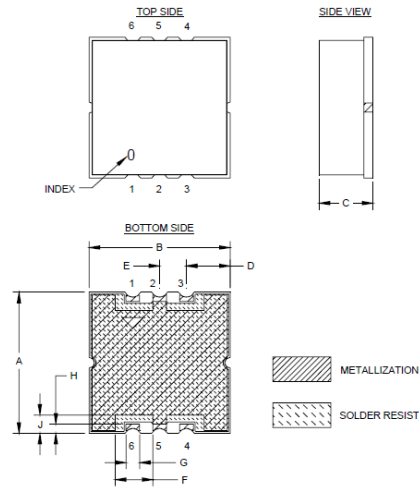
Demo Board MCL P/N: TB-XXXX+  
Suggested PCB Layout (PL-680)

SUGGESTED MOUNTING CONFIGURATION FOR  
HE1354 CASE STYLE

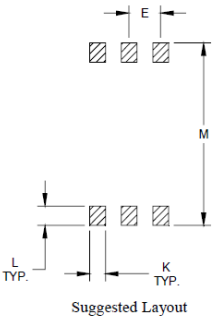


- NOTES:
- 1. TRACE WIDTH IS SHOWN FOR ROGERS (R04350B) WITH DIELECTRIC THICKNESS .030"±.002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
  - 2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
- DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

Outline Drawing



PCB Land Pattern



Outline Dimensions ( inch mm )

A	B	C	D	E	F	G	H	J	K
.394	.394	.150	.122	.075	.098	.038	.026	.051	.038
10.01	10.01	3.81	3.10	1.90	2.49	0.97	0.66	1.29	0.97
L	M								Wt.
.046	.434								grams
1.17	11.02								0.7

Note: Please refer to case style drawing for details

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