



Mini-Circuits®

SURFACE MOUNT

Bandpass Filter

EBPF-185-1+

50Ω 30 to 340 MHz

FEATURES

- Miniature shielded package
- Low insertion loss
- High rejection

APPLICATIONS

- Defense / Military
- Military Radio Communications

CASE STYLE: HE1354

+RoHS Compliant

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

ELECTRICAL SPECIFICATIONS AT -40°C TO 85°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Units
Passband	Insertion Loss	F1-F2	30 - 340	—	1.1	1.7	dB
	Return Loss	F1-F2	30 - 340	10	14	—	dB
Stop Band, Lower	Rejection	DC-F3	DC - 1	35	—	—	dB
		F4	10	20	—	—	dB
Stop Band, Upper	Rejection	F5	400	6	9	—	dB
		F6-F7	480 - 1000	30	33	—	dB

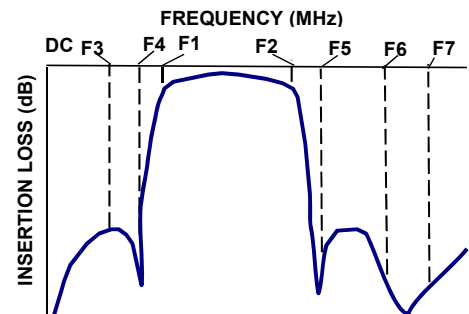
MAXIMUM RATINGS

Parameter	Ratings
Operating temperature	-40°C to +85°C
Storage temperature	-55°C to +100°C
RF Power Input *	27 dBm (CW)

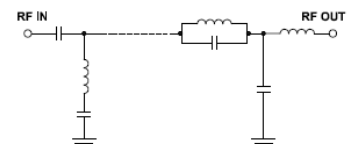
Permanent damage may occur if any of these limits are exceeded.

*Passband rating

TYPICAL FREQUENCY RESPONSE



FUNCTIONAL SCHEMATIC



REV. X0
ECO-014660
EBPF-185-1+
EDUXXXX
URJ
220822

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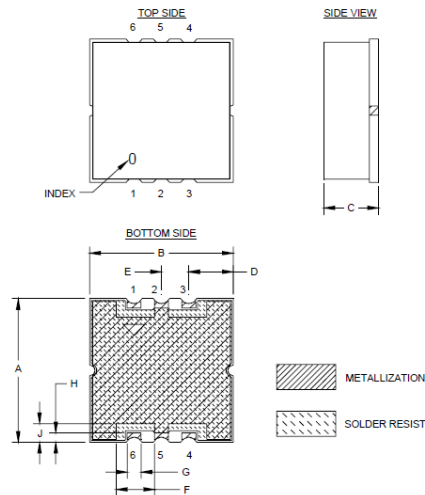
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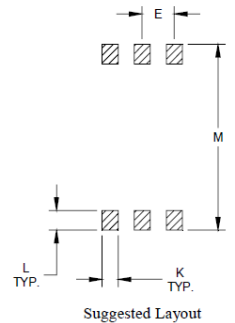
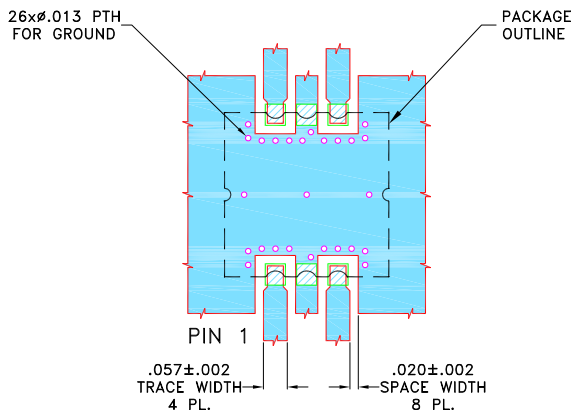
PAD CONNECTIONS

RF IN	1
RF OUT	6
GROUND	2,5
NOT USED	3,4

OUTLINE DRAWING



PCB Land Pattern

DEMO BOARD MCL P/N: TB-XXXX+
SUGGESTED PCB LAYOUT (PL-680)

NOTES:

- 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.
- 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 DIMENSIONS (Inches)
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								
.046	.434								
1.17	11.02								
									Wt.
									grams
									0.7

Note: Please refer to case style drawing for details

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

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