



SURFACE MOUNT

# Bandpass Filter

**EBPF-545-1+**

50Ω 340 to 750 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	340 - 750	—	1	1.7	dB
	Return Loss	F1-F2	340 - 750	10	12	—	dB
Stop Band, Lower	Rejection	DC-F3	DC - 135	35	—	—	dB
		F4	220	20	27	—	
Stop Band, Upper	Rejection	F5	900	10	17	—	dB
		F6-F7	1000 - 2000	35	—	—	dB

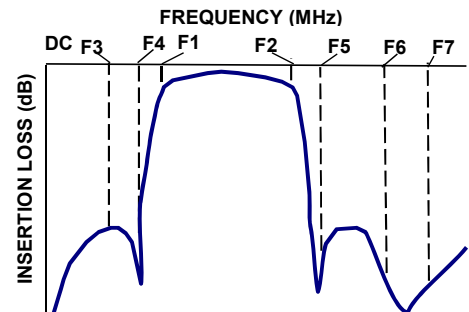
## MAXIMUM RATINGS

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

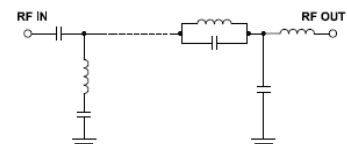
Permanent damage may occur if any of these limits are exceeded.

\*Passband rating

## TYPICAL FREQUENCY RESPONSE



## FUNCTIONAL SCHEMATIC



REV. X0  
ECO-014662  
EBPF-545-1+  
EDUXXXX  
URJ  
220822





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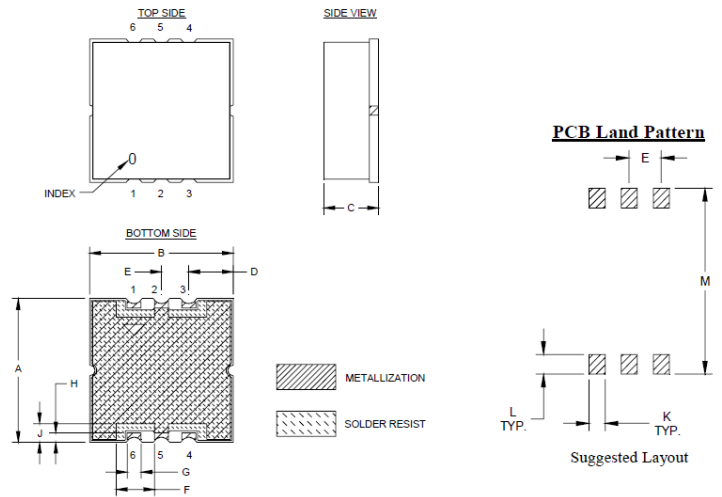
## Bandpass Filter

EBPF-545-1+

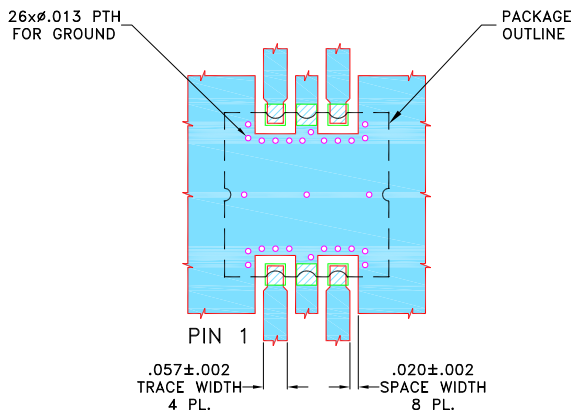
## PAD CONNECTIONS

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

## OUTLINE DRAWING



**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)

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.
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