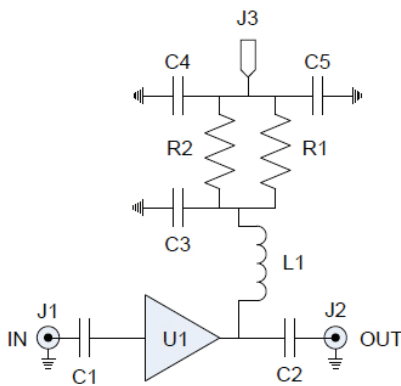


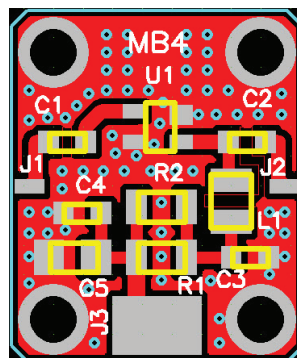
### FEATURES

- Fits SOT-343 (SC-70) amplifier packages
- Input/Output blocking capacitors
- RF bypass and bias capacitors
- Dual bias resistors
- RF bias inductor
- RO-4350 board material
- Fits MicroAmp MH-series housings

The MicroAmp MB-4 circuit board is designed for rapid prototyping of many different RF MMIC amplifiers in SOT-343 (SC-70) 4-pin packages that use a common RF output and bias pin from manufacturers such as Avago (ADA) and others. This board will fit the MicroAmp MH series of connectorized housings that allow it to be used as a single amplifier stage or cascaded with other MicroAmp boards for added versatility. Boards are fabricated from a high-performance 13 mil thick RO-4350 laminate with RoHS compatible ENIG plating (electroless nickel/immersion gold) on both the component side and the solid bottom ground plane. The board measures 0.490" x 0.590" and mounts into the housing with four #1-72 screws. Amplifiers can be easily designed and assembled with standard surface-mount passive components. It includes provisions for input and output DC blocking capacitors (0603), RF and bias bypass capacitors (0603/0805), dual bias resistors for flexible thermal management (0805), and a RF bias inductor (0805 or 0603). Pads for the RF connectors allow the SMA center pins to be easily soldered to the board after it is installed into the housing, as well as a large pad to connect the completed board assembly to the bias feed-through.



AMPLIFIER SCHEMATIC



ASSEMBLY

### REF SIZE FUNCTION

| REF | SIZE            | FUNCTION  |
|-----|-----------------|-----------|
| C1  | 0603            | DC block  |
| C2  | 0603            | DC block  |
| C3  | 0603            | Bypass    |
| C4  | 0603            | Bypass    |
| C5  | 0805            | Bypass    |
| R1  | 0805            | DC bias   |
| R2  | 0805            | DC bias   |
| L1  | 0805/0603       | RF bias   |
| U1  | SOT-343 (SC-70) | Amplifier |
| J1  |                 | Input     |
| J2  |                 | Output    |
| J3  |                 | Bias      |

For additional product information, please visit [www.twinind.com](http://www.twinind.com)

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