



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



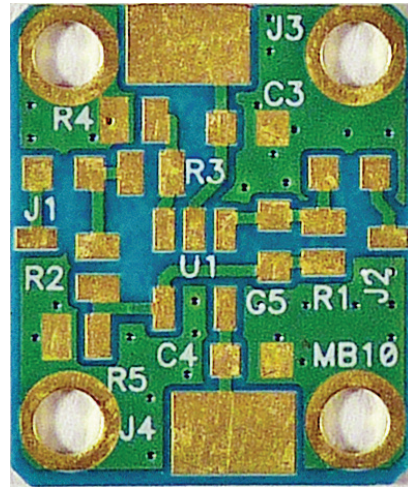
## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

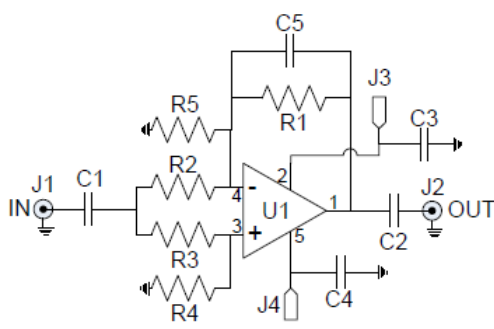




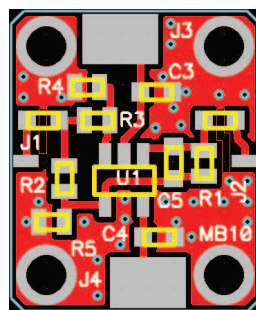
### FEATURES

- Fits standard 5-pin SOT-23 op-amp packages
- Inverting or non-inverting configuration
- Optional DC blocks on input and output
- Uses standard 0603 passives
- RO-4350 board material
- Fits MicroAmp MH-series housings

The MicroAmp MB-10 circuit board is designed for rapid prototyping of operational amplifier circuits using popular 5-pin SOT-23 packages with the output on pin 1, non-inverting input on pin 3, and the inverting input on pin 4. It can be configured as an inverting or non-inverting topology with selectable input and feedback resistors and has a parallel feedback capacitor for filtering or compensation. 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. Amplifier circuits can be easily designed and assembled with standard 0603 surface-mount passive components. It includes provisions for input and output DC blocking capacitors, or these can be replaced with zero-ohm jumpers for DC operation. Pads for the input/output connectors allow the SMA center pins to be easily soldered to the board after it is installed into the housing, as well as large pads to connect the bias voltages to feed-throughs. Separate bias pads are provided for single and dual bias configurations. Use caution on the bias polarity depending upon the specific op-amp being used.



Op-Amp Schematic



ASSEMBLY

### REF SIZE FUNCTION

| REF | SIZE   | FUNCTION                      |
|-----|--------|-------------------------------|
| C1  | 0606   | Block or jumper (not labeled) |
| C2  | 0603   | Block or jumper (not labeled) |
| C3  | 0603   | Bias bypass                   |
| C4  | 0603   | Bias bypass                   |
| C5  | 0603   | Inverting feedback            |
| R1  | 0603   | Inverting feedback gain       |
| R2  | 0603   | Input gain                    |
| R3  | 0603   | Input divider                 |
| R4  | 0603   | Input divider                 |
| R5  | 0603   | Feedback gain                 |
| U1  | SOT-23 | Op-Amp                        |
| J1  |        | Signal input                  |
| J2  |        | Signal output (pin 1)         |
| J3  |        | Bias or ground (pin 2)        |
| J4  |        | Bias or ground (pin 5)        |