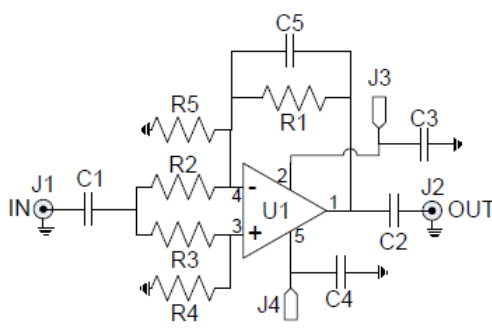


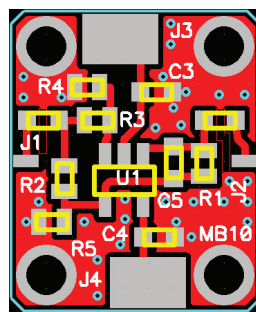
FEATURES

- 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)