

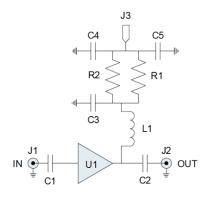
Twin Industries

Electronic Hardware Prototyping Tools

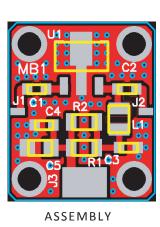
FEATURES

- Fits SOT-89 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-1 circuit board is designed for rapid prototyping of many different RF MMIC amplifiers in the SOT-89 package available from manufacturers such as Analog Devices, Avago, Hittite, Mini-Circuits, RFMD, Triquint, 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 compatble 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



R E F	SIZE	FUNCTION	
REF C1 C2 C3 C4 C5 R1 R2 L1 U1 J1 J2 J3	SIZE 0603 0603 0603 0603 0805 0805 0805 0805/0 SOT-89	DC block DC block Bypass Bypass Bypass DC bias DC bias DC bias RF bias	
12		0105	

For additional product information, please visit www.twinind.com Contact information: 925-866-8946 (phone) 925-866-8947 (fax) Sales@twinind.com