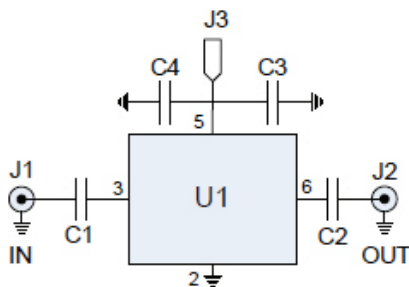


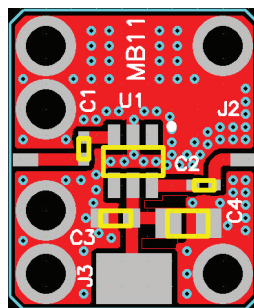
FEATURES

- Fits Hittite 6-pin SOT-23 prescaler packages
- Divide by 2/4/8 configurations
- Input frequencies up to 8 GHz
- DC blocks on input and output
- RO-4350 board material
- Fits MicroAmp MH-series housings

The MicroAmp MB-11 circuit board is designed for rapid prototyping of Hittite Microwave 6-pin SOT-23 prescalers. HMC-43X prescalers are available in divide by 2/4/8 versions (HMC-432/433/434) which operate at input frequencies as high as 8 GHz. This board will fit the MicroAmp MH series of connectorized housings that allow it to be used as a single prescaler 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 or six #1-72 screws to insure optimal grounding for high frequency operation. Prescaler circuits can be easily assembled with standard surface-mount passive components. It includes provisions for input and output DC blocking capacitors and bias bypass capacitors. Pads for the RF 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 a large pad to connect the bias voltage to the feed-through. These prescalers have a tendency to output broadband noise or oscillations when not driven with sufficient input power. Consult the Hittite data sheets for proper drive levels.



PRESCALER SCHEMATIC



ASSEMBLY

REF SIZE FUNCTION

REF	SIZE	FUNCTION
C1	0402	DC block
C2	0402	DC block
C3	0603	Bypass
C4	0603/0805	Bypass
U1	SOT-23	Prescaler
J1		Signal input (pin 3)
J2		Signal output (pin 6)
J3		Bias (pin 5)