

PULSED CURRENT SOURCE WITH INTERNAL IMPEDANCE MATCHING

ABSTRACT

Pulsed current circuitry for electromigration testing of semiconductor integrated circuits and components. The circuit includes a multiplexer that outputs analog voltage pulses, and is capable of generating both bipolar and unipolar voltage pulses. At least one operational amplifier and resistor receive the voltage pulses from the multiplexer and convert the voltage pulses to current pulses. A charge booster circuit is provided for minimizing overshoots and undershoots during transitions between current levels in the test circuit.

FIG. 4