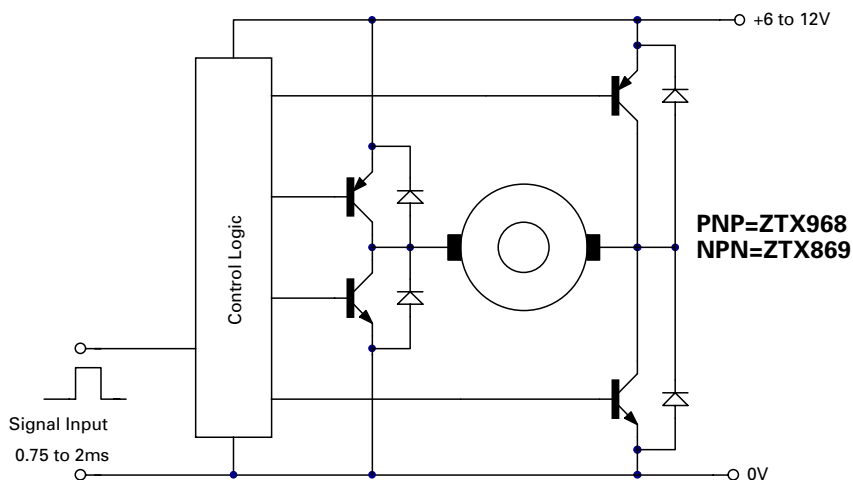


Remote Control Motor Driver



The combined features of low saturation voltage, a 5A continuous current capability, very high gain at high currents, and the compact dimensions of the TO92 style E-Line package, provide an attractive alternative to TO220 devices in this commonly used driver circuit.

The ZTX869 and ZTX968 produce typical $V_{CE(sat)}$ values at 5A collector current, of 180mV and 250mV respectively, and possess useful gains of 100 and 50 at 20A (typical: for the '869 and '968), ensuring cool and efficient operation under surge conditions. It is also possible in some designs to omit the

collector-emitter diodes, as the very high inverse gain inherent to the Zetex process (which in low voltage variants can be approximately 33 to 50% of the forward h_{FE}) acts to conduct inductive transients. This prevents the subsequent degradation to the emitter-base junction, as must be considered and accounted for in conventional designs.

These features make it possible to construct this control unit, for electric motors with input power requirements to over 40W continuous, at a fraction of the size and yielding a typical 4 times cost saving over the present MOSFET based designs.