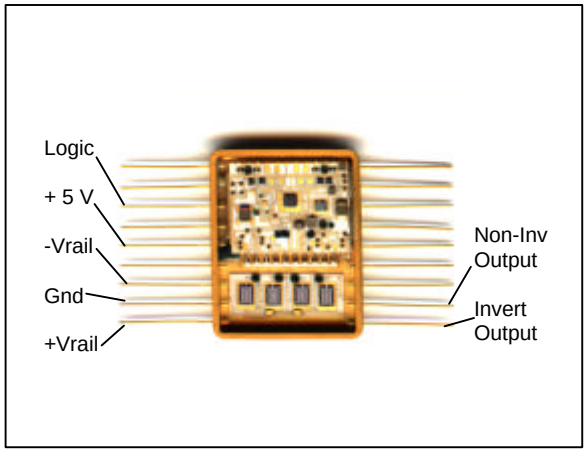
High Voltage Hybrid Drivers, 1 Kilovolt Capability



Using patent-pending high voltage technology, this unique family of devices allows very high voltage capability with switching speeds down to 500 nsec in some cases. The device at left is a two-output 350 Volt PIN diode driver, shown actual size.

By integrating miniature transformers within a chip-and-wire hybrid circuit, these drivers provide very high voltage switching in a compact form factor.

Logic input can be standard TTL or CMOS, High Noise Immunity TTL, or balanced logic (such as RS-422). Logic function is DC-coupled, as opposed to some high-voltage technologies that can't provide a persistent positive or negative output state.

Output currents can range to hundreds of milliamps per output, and the magnitude of the output current is set by external resistors. The user has complete control over the positive and negative output rail supply voltages. Each driver output structure can be thought of as a high-speed SP2T DC switch that switches to either of the two output rail supply voltages, provided that the "positive" rail is more positive than the "negative" rail and that the rated voltage deltas aren't exceeded. The outputs can sink and source current.

An Enable/Disable logic input can be provided, as an option, to totally isolate the driver outputs into a "tri-state" like mode. An internal +5 V regulator is an option to allow TTL compatible front-end circuitry to be operated from higher positive voltages.

The high voltage technology used in this family guarantees a fixed "dead-time" during switching, to assure safe and reliable switching without "shoot-thru" effects that can lead to high current consumption and device failure.

Hermetic packaging and MIL screening are available. Contact the factory for more complete details and applications assistance.

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