<u>Impellimax</u>



Internally decoded high voltage drivers for high power RF switching. Unit accepts a binary or BCD TTL word that selects one of the five outputs goes negative, while the remaining channels are positive. Outputs provide current spikes for fast switching speed.

Package size is .625 square, .10 thick, 22 leads

High-power multi-throw RF switches can be easily driven by this family of standard high-voltage decoded PIN diode drivers. Load diodes can be connected directly to the output pins, and TTL selection logic is applied to the device input pins.

Switching speed is typically 30 nsec open circuit. Load diode lifetime and biasing considerations will affect RF switching speed. Where speed requirements are less of an issue, the slower DS version of this family can be used, to provide a lower cost solution.

The decoding arrangement of the unit can be user-configured to be either 0 to 4 (binary 000 to 010) or 1 to 5 (binary 001 to 011) by externally strapping the desired logic testpoints together. Other decoding arrangements can be provided. Contact the factory for details. Pin-out of this PIN driver family is consistent with the Impellimax lower voltage DF series, which simplifies the migration of low voltage designs to higher operating voltages.

These units contain internal .01 uF bypassing on the +5V supply, and 5000 pF bypassing on the negative supply. This bypassing eliminates high frequency noise components within the hybrid, but additional external bypassing is recommended for best switching speed performance. Negative supply range is -5 to -100 Volts.

Output currents can be internally set for +10 mA thru +75mA, and current spiking is provided by internal 1000 pF output spiking capacitors. Output testpoints are also provided, to allow the user to adjust output currents and current spikes, and to allow other output circuit capabilities.

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

Sensor Products

Linearizers

Page 1 of 1

Note # SD103

Released 10/1/97 Last Revision 10/1/97

Impellimax, Inc. 375 West Hollis Street, Nashua NH 03060 tel: 603-886-9569 fax: 886-4901 www.impellimax.com