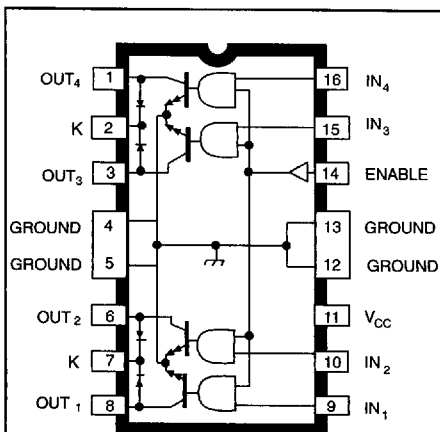


2540

QUAD DARLINGTON POWER DRIVER



Dwg. No. A-11,561A

ABSOLUTE MAXIMUM RATINGS at $T_A = 25^\circ\text{C}$

Output Voltage, V_{OUT}	50 V
Output Current, I_{OUT} (peak)	2.5 A
(continuous)	1.8 A
Logic Supply Voltage, V_{CC}	7.0 V
Input Voltage, V_{IN}	7.0 V
Operating Temperature Range, T_A	-40°C to $+85^\circ\text{C}$
Storage Temperature Range, T_S	-55°C to $+150^\circ\text{C}$

Combining AND logic gates and inverting high-current bipolar outputs, the UDQ2540B quad Darlington power driver provides interface between low-level signal-processing circuits and power loads totaling 360 W. Each of the four independent outputs can sink up to 1.8 A in the ON state with peak inrush currents to 2.5 A. The four power outputs are each comprised of an open-collector Darlington driver and an internal flyback/clamp diode for switching inductive loads. They feature a minimum breakdown and sustaining voltage of 50 V. The logic inputs are compatible with TTL and 5 V CMOS logic systems.

Typical applications include print heads, relays, solenoids, and dc stepping motors. The UDQ2540B can also be used to drive high-current incandescent lamps, LEDs, and heaters. A similar device, specifically intended for driving a unipolar stepper motor in the two-phase drive format, is the UDQ2544B.

Representative electrical characteristics (at an ambient temperature of $+25^\circ\text{C}$) for the commercial type UDN2540B are shown in Section 3. Complete, detailed technical information on the UDQ2540B is available on request.

The UDQ2540B is supplied in a 16-pin batwing power DIP. The batwing construction provides for maximum package power dissipation in a standard DIP construction. At 25°C , and with only 1 sq. in. of copper foil at the ground tabs, the package is capable of safely dissipating 3.8 W.

FEATURES

- 1.8 A Continuous Output Current
- Output Voltage to 50 V
- TTL and 5 V CMOS Compatible Inputs
- Efficient Input/Output Pinning
- Integral Transient-Suppression Diodes
- Replaces L6221A

Always order by complete part number: **UDQ2540B**.