



QJ/DHA 01.19-2011

LD9305

Car Door Lock Gear Motor Controller IC

Applications

LD9305 is used in Car Doors lock actuator and similar applications. IC control unit based on the gear motor and block. (Analog L9305A).

Features

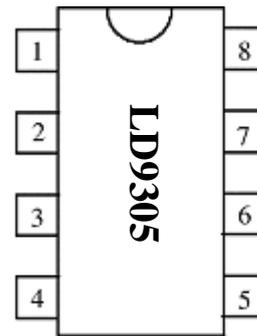
- Two independent adjustable timer
- Two independent relay control output
- Internal Freewheeling diodes
- Internal Zener diode
- Low-drop and large-current drivers

Ordering Information

Package	Remarks
SOP8	Tubed, Reeled, Pb-free
DIP8	Tubed, Pb-free

Pin Function

Pin	Function
1	Timer1
2	Ground
3	Timer2
4	Comparator Input2
5	Relay Output2
6	Power Supply
7	Relay Output1
8	Comparator Input1



Functional Description

LD9305 contains two drivers. Drivers in LD9305 have an input comparator, a low voltage drop and high current gain amplifier, a damping diode for surge protection, which allows the chip overvoltage surge up to 90V.

Drivers control relays K1 and K2 during operation of timers. The input from the switch SW1, start teams of the internal timers in the chip. The length of time the relay is given by charging - discharging circuit comprising capacitors C1, C2 and resistors R1, R2, which are fine-tuning for duration of the relay. The resistors can be from 18kΩ to 10kΩ, to obtain pulse durations from 0.8s to 0.6s.

Drivers have the diodes d1 and d2 to dampen voltage surge during turn-off relay K1 and K2.

Resistor R4 limits the current damping. In the power circuit, capacitor C3 in conjunction with resistors R3 and R4, constitute a filter.

Diode D1 protects the chip from the supply voltage polarity. When disable gear motor, that resulting in a voltage surges with positive polarity, diode D2 does not pass them into the power circuit of the chip.

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Block Diagram

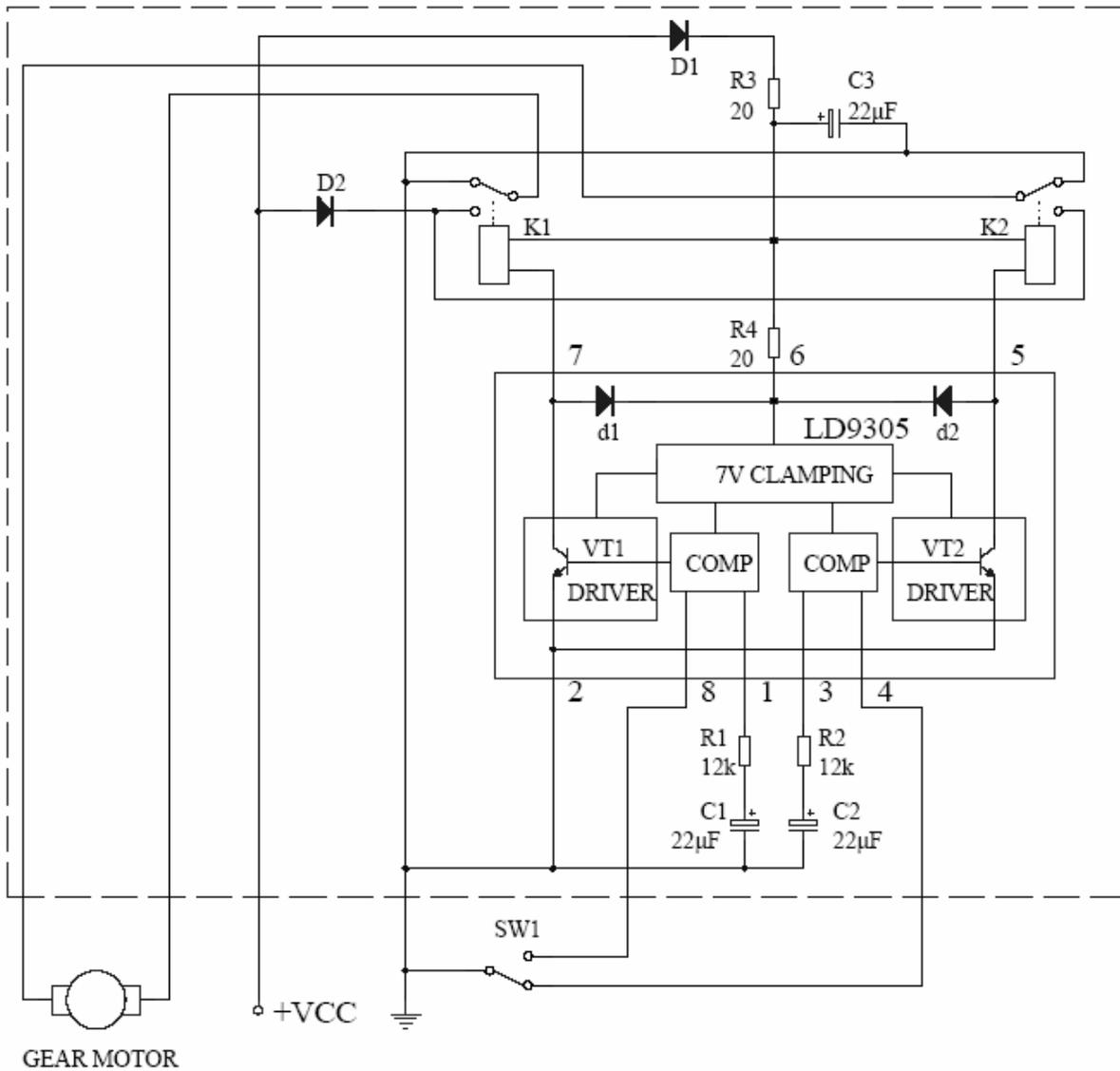


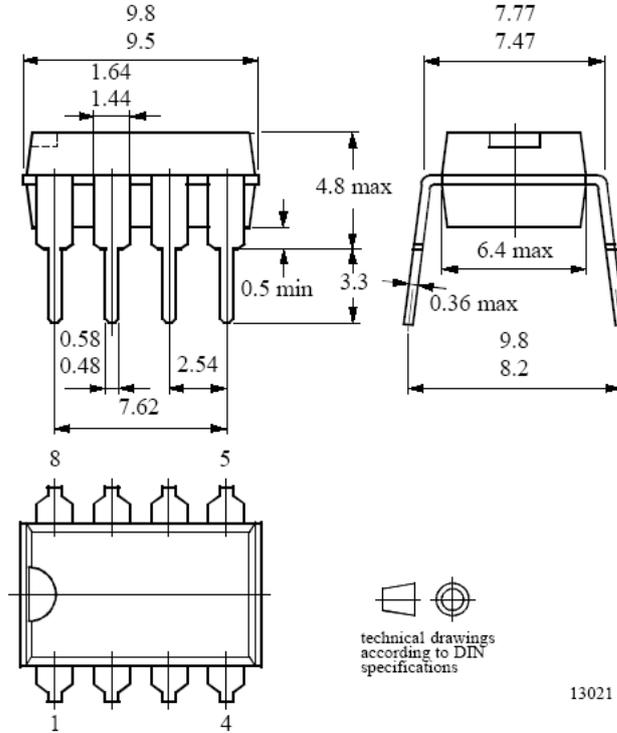
Fig. 1. LD9305 typical applications diagram



Package Information

DIP8

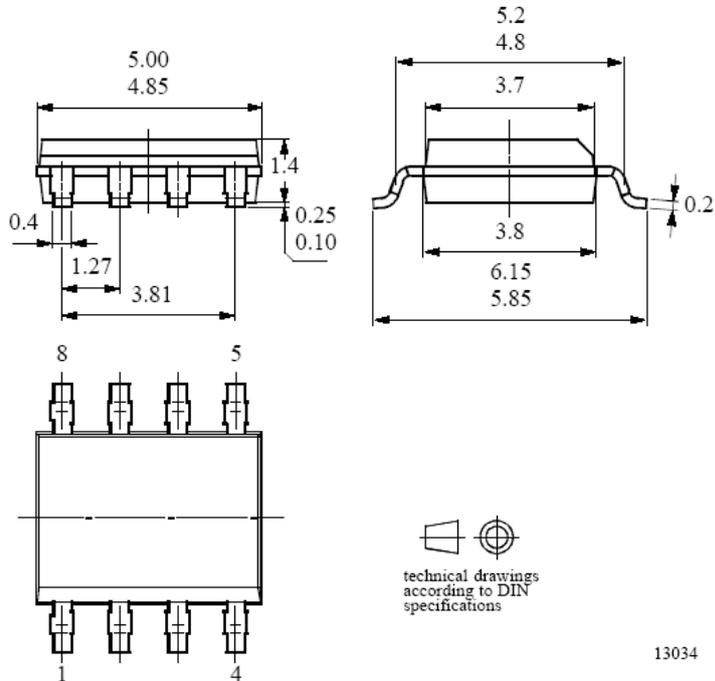
Dimensions in mm



13021

SOP8

Dimensions in mm



13034