

DS14C202

Low Power + 5V Powered EIA/TIA-232

Dual Driver/Receiver

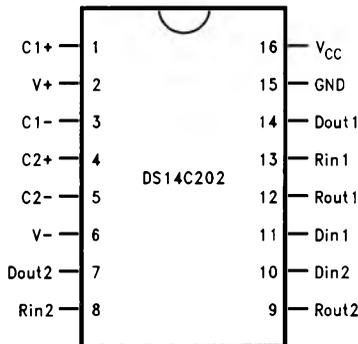
General Description

The DS14C202 is a low power dual driver/receiver featuring an onboard DC to DC converter. This eliminates the need for $\pm 12V$ power supplies and requires only a +5V power supply. Only four 0.1 μF capacitors are needed for the DC to DC converter. The drivers maintain greater than $\pm 5V$ output signal levels at data rates in excess of 120 kbits/sec when loaded in accordance with the EIA/TIA-232-E specification. I_{CC} is specified at TBD mA maximum, making the device ideal for battery and power conscious applications. The drivers' slew rate is set internally, eliminating the need for external slew rate capacitors. The device is designed to interface data terminal equipment (DTE) with data circuit-terminating equipment (DCE). The driver inputs and receiver outputs are TTL and CMOS compatible. DS14C202 driver outputs and receiver inputs meet EIA/TIA-232-E and ITU-T V.28 standards. This device is an enhanced version of the DS14C232 that requires smaller external capacitors (0.1 μF) and has a higher data rate of 120 kbit/sec.

Features

- Used only four small 0.1 μF capacitors for DC to DC converter
- Operates over 120 kbit/sec
- Pin compatible with MAX202, MAX232A and others
- Single +5V power supply
- Low power
- DS14C202 meets EIA/TIA-232-E and ITU-T V.28 standards
- CMOS technology
- Package efficiency—2 drivers and 2 receivers
- Available in Plastic DIP and Narrow and Wide SOIC packages
- Extended temperature range: $-40^{\circ}C$ to $+85^{\circ}C$

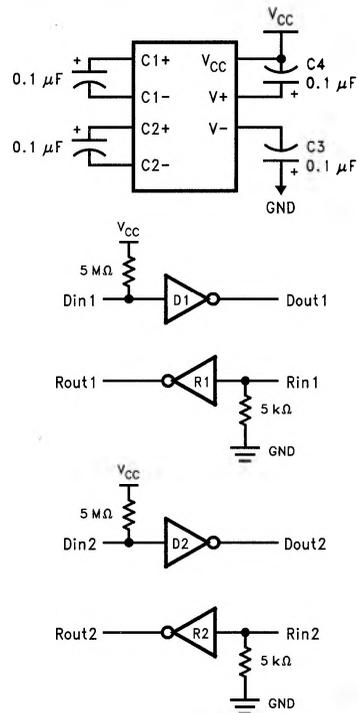
Connection Diagram



TL/F/12622-1

Order Number DS14C202CN, DS14C202CM,
DS14C202TN, DS14C202TM,
DS14C202CWM or DS14C202TWM
See NS Package Number M16A, M16B or N16A

Functional Diagram



TL/F/12622-2