**Siliconix incorporated**

# Si9200
# CAN Bus Driver

T-52-09

## FEATURES

- Survives Shorts and Transients on Multiplexed Bus in Automotive Applications
- Single Power Supply
- Compatible with Intel 82526 CAN Controller
- Direct Interface – No External Components Required

## APPLICATION

- Two Wire Multiplexer Interface

## END PRODUCTS

- Automobiles
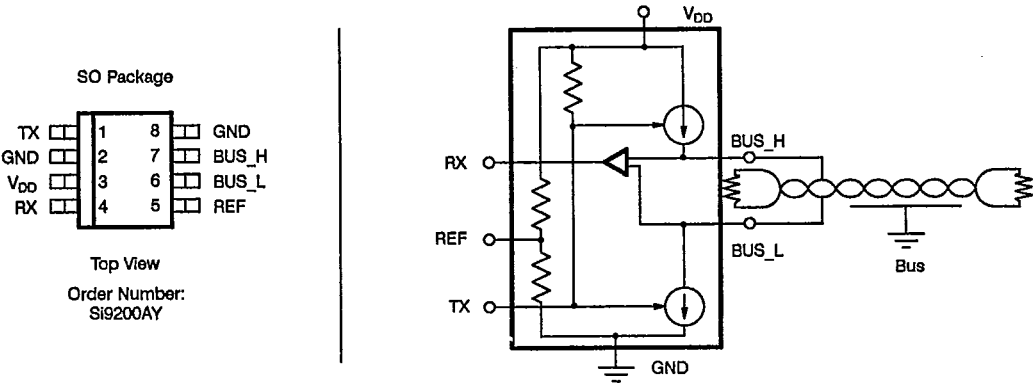- Trucks
- Tractors
- Industrial Controls

## DESCRIPTION

The Si9200 is designed to interface between the Intel 82526 CAN Controller and the physical bus to provide drive capability to the bus and differential receive capability to the controller. It is designed to operate reliably over the extended temperature range, absorb typical electrical transients on the bus which may occur in an automotive or industrial application, and protect itself against any abnormal bus conditions.

The Si9200 is built using the Siliconix D/CMOS process. This process supports CMOS, DMOS, and isolated bipolar transistors and uses an epitaxial layer to prevent latchup. The bus line pins are diode protected and can be driven beyond the $V_{DD}$ to ground range.

The Si9200 is offered in the space efficient 8-pin high-density surface mount plastic package.
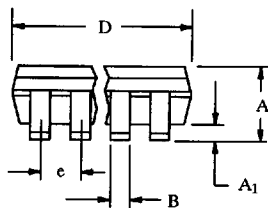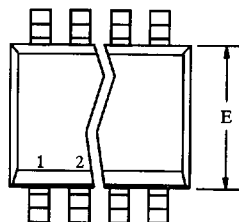
## PIN CONFIGURATION/FUNCTIONAL BLOCK DIAGRAM



SO Package

| | | | |
|---|---|---|---|
| TX | 1 | 8 | GND |
| GND | 2 | 7 | BUS_H |
| $V_{DD}$ | 3 | 6 | BUS_L |
| RX | 4 | 5 | REF |

Top View
Order Number:
Si9200AY

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## TRUTH TABLE

| TX | BUS_H | BUS_L | Bus State |
|---|---|---|---|
| 0 | High | Low | Dominant |
| 1 (or Floating) | Floating | Floating | Recessive |

# Advance Information

# SO Package (Y Suffix), 8–16 Leads



| Dim | Millimeters | | Inches | |
|-----|-----|-----|-----|-----|
| | Min | Max | Min | Max |
| A | 1.35 | 1.75 | 0.053 | 0.069 |
| $A_1$ | 0.10 | 0.20 | 0.004 | 0.008 |
| B | 0.35 | 0.45 | 0.014 | 0.018 |
| C | 0.18 | 0.23 | 0.007 | 0.009 |
| D-8 | 4.60 | 5.20 | 0.181 | 0.205 |
| D-14 | 8.35 | 8.95 | 0.329 | 0.352 |
| D-16 | 9.60 | 10.20 | 0.378 | 0.402 |
| E | 3.55 | 4.05 | 0.140 | 0.160 |
| e | 1.27 BSC | | 0.050 BSC | |
| H | 5.70 | 6.30 | 0.224 | 0.248 |
| L | 0.60 | 0.80 | 0.024 | 0.031 |
| $\Theta$ | 0° | 8° | 0° | 8° |

ALL LEADS

| ⌂ | 0.101 mm |
|---|---|
| | 0.004 IN |

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