

LTC2875IDD#PBF

Data Sheet

LTC2875 - ±60V Fault Protected 3.3V or 5V 25kV ESD High Speed CAN Transceiver

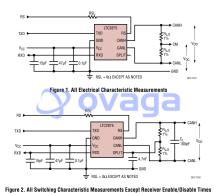
Manufacturers Analog Devices, Inc

Package/Case DFN-8

Product Type Interface ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for LTC2875IDD#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The LTC2875 is a robust high speed, low power CAN transceiver operating on 3.3V or 5V supplies that features $\pm 60V$ overvoltage fault protection on the data transmission lines during all modes of operation, including powerdown. The maximum data rate has been extended to 4Mbps to support high speed protocols based on the CAN physical layer. Supports up to 4Mbps CAN with Flexible Data Rate (CAN FD). Enhanced ESD protection allows these parts to withstand $\pm 25kV$ HBM on the transceiver interface pins without latchup or damage.

Extended ± 36 V input common mode range and high common mode rejection on the CAN receiver provides tolerance of large ground loop voltages. A sophisticated CAN driver with active symmetry control maintains tight control of the common mode voltage for excellent electromagnetic emission, while the variable slew rate and split termination support allow additional EME reduction.

Features

Protected from Overvoltage Line Faults to $\pm 60 \mathrm{V}$

3.3V or 5V Supply Voltage

High Speed CAN FD Operation Up to 4Mbps

Variable Slew Rate Driver with Active Symmetry Control and SPLIT Pin for Low Electromagnetic Emission (EME)

Extended Common Mode Range (±36V)

Ideal Passive Behavior to CAN Bus with Supply Off

Current Limited Drivers and Thermal Shutdown

Power-Up/Down Glitch-Free Driver Outputs

Micropower Shutdown Mode

Transmit Data (TXD) Dominant Timeout Function

ISO 11898-2 and CAN FD Compliant

DeviceNet Compatible

Up to MP-Grade Available (-55°C to 125°C)

3mm × 3mm 8-Lead DFN and SO-8 Packages

Application

Industrial Control and Instrumentation

Networks

Automotive and Transportation Electronics

Building Automation, Security Systems,

HVAC

Medical Equipment

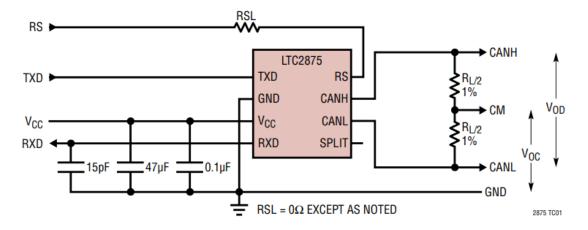


Figure 1. All Electrical Characteristic Measurements

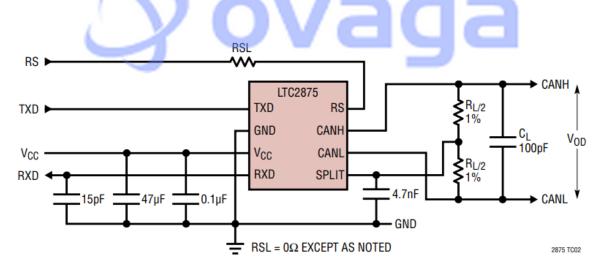
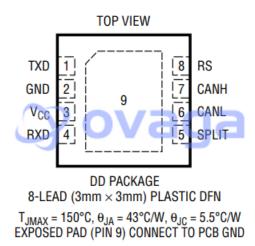


Figure 2. All Switching Characteristic Measurements Except Receiver Enable/Disable Times



Related Products



LTC4300A-1IMS8#PBF

Analog Devices, Inc MSOP8



LTC2870IFE#PBF

Analog Devices, Inc TSSOP28



LTC6820HMS#PBF

Analog Devices, Inc MSOP-16



LTC2854HDD#PBF

Analog Devices, Inc QFN-10



LTC2870IUFD#PBF

Analog Devices, Inc 28-QFN



LTC6820IMS#PBF

Analog Devices, Inc MSOP16



LTM2881IV-3#PBF

Analog Devices, Inc LGA32



LTC2852IDD#PBF

Analog Devices, Inc DFN10