ADM3053BRWZ-REEL7

Data Sheet

CAN Interface IC 2.5kVrms Signal + Power ISO CAN Xcvr

Manufacturers	Analog Devices, Inc
Package/Case	SOIC-20
Product Type	Interface ICs
RoHS	Rohs
Lifecycle	

Images are for reference only

Please submit RFQ for ADM3053BRWZ-REEL7 or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The ADM3053 is an isolated controller area network (CAN) physical layer transceiver with an integrated isolated dc-to-dc converter. The ADM3053 complies with the ISO 11898 standard.

The device employs Analog Devices, Inc., iCoupler® technology to combine a 2-channel isolator, a CAN transceiver, and Analog Devices isoPower® dc-to-dc converter into a single SOIC surface mount package. An on-chip oscillator outputs a pair of square waveforms that drive an internal transformer to provide isolated power. The device is powered by a single 5 V supply realizing a fully isolated CAN solution.

The ADM3053 creates a fully isolated interface between the CAN protocol controller and the physical layer bus. It is capable of running at data rates of up to 1 Mbps.

The device has current limiting and thermal shutdown features to protect against output short circuits. The part is fully specified over the industrial temperature range and is available in a 20-lead, wide-body SOIC package.

The ADM3053 contains isoPower technology that uses high frequency switching elements to transfer power through the transformer. Special care must be taken during printed circuit board (PCB) layout to meet emissions standards. Refer to the AN-0971 Application Note, Control of Radiated Emissions with isoPower Devices, for details on board layout considerations.

Features

2.5 kV rms signal and power isolated CAN transceiver

isoPower integrated isolated dc-to-dc converter

5 V operation on VCC

5 V or 3.3 V operation on VIO

Complies with ISO 11898 standard

High speed data rates of up to 1 Mbps

Unpowered nodes do not disturb the bus

Connect 110 or more nodes on the bus

Slope control for reduced EMI

Thermal shutdown protection

High common-mode transient immunity: >25 kV/µs

Safety and regulatory approvals

UL recognition

2500 V rms for 1 minute per UL 1577

CSA Component Acceptance Notice 5A

VDE Certificate of Conformity

DIN EN 60747-5-2 (VDE 0884 Part 2):>

Industrial operating temperature range (−40°C to +85°C)

Available in wide-body, 20-lead SOIC package

Application

CAN data buses

Industrial field networks

Related Products

[ADV7181CBSTZ]

Analog Devices, Inc

LQFP-64

[AD8170AR]

Analog Devices, Inc

SOP8

[AD724JR]

Analog Devices, Inc

SOIC-16

[ADV7393BCPZ]

Analog Devices, Inc

LFCSP-VQ-40

ADV7391WBCPZ

Analog Devices, Inc

LFSCP-3

ADV7390BCPZ

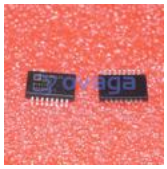
Analog Devices, Inc

QFN32

ADV7341BSTZ

Analog Devices, Inc

LQFP-64



ADUM4160BRIZ

Analog Devices, Inc

SOIC-16