


Comparator Dual R-R I/P 2.75V/5.5V Automotive 8-Pin SOIC

T/R



Images are for reference only

[Inquiry](#)

Manufacturer:	Texas Instruments, Inc
Package/Case:	SOIC-8
Product Type:	Linear Displacement Sensors
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active

General Description

The TLV902x -Q1 and TLV903x -Q1 are a family of Automotive grade dual and quad channel comparators. The family offers low input offset voltage, integrated Power-On Reset (POR) circuitry, and fault-tolerant inputs with an excellent speed-to-power combination with a propagation delay of 100 ns. Operating voltage range of 1.65 V to 5.5 V with a quiescent supply current of 18 μ A per channel.

This device family also includes a Power-on Reset (POR) feature that ensures the output is in a known state until the minimum supply voltage has been reached and a small time period passed before the output starts responding to the inputs. This prevents output transients during system power-up and power-down.

These comparators also feature no output phase inversion with fault-tolerant inputs that can go up to 6-V without damage. This makes this family of comparators well suited for precision voltage monitoring in harsh, noisy environments.

The TLV902x -Q1 comparators have an open-drain output stage that can be pulled below or beyond the supply voltage, making it appropriate for low voltage logic and level translators.

The TLV903x -Q1 comparators have a push-pull output stage capable of sinking and sourcing milliamps of current when controlling an LED or driving a capacitive load such as a MOSFET gate.

The TLV902x -Q1 and TLV903x -Q1 are specified for the Automotive temperature range of -40°C to +125°C and are available in a standard leaded and leadless packages.

Key Features

Qualified for automotive applications

AEC-Q100 qualified with the following results:

Device temperature grade 1: -40°C to 125°C ambient operating temperature range

Device HBM ESD classification level 2

Device CDM ESD classification level C6

1.65 V to 5.5 V supply range

Power-On Reset (POR) for known start-up

Precision input offset voltage 300 μ V

100ns Typ propagation delay

Low quiescent current 16 μ A per channel

Rail-to-Rail input voltage range exceeds the rails

Open-drain output option (TLV902x-Q1)

Push-pull output option (TLV903x-Q1)

2 kV ESD Protection

Recommended For You

TLC27M2CP

Texas Instruments, Inc

DIP8

TLV3501AIDR

Texas Instruments, Inc

SOP8

TL071ACP

Texas Instruments, Inc

DIP-8

TL062CDR

Texas Instruments, Inc

SOP8

TLE2142IP

Texas Instruments, Inc

DIP8

TLC272AID

Texas Instruments, Inc

SOP-8

TLV3502AQDCNRQ1

Texas Instruments, Inc

SOT23-8

TL084CD

Texas Instruments, Inc

SOP14

TLV2711DBVR

Texas Instruments, Inc

SOT23-5

TLC074CD

Texas Instruments, Inc

SOP14

TLC2272ACD

Texas Instruments, Inc

SOP-8

TLC2272AIDR

Texas Instruments, Inc

SOP8

TLV2462ID

Texas Instruments, Inc

SOP-8

TLV2471QDBVRQ1

Texas Instruments, Inc

SOT23-5

TLV2381IDBVR

Texas Instruments, Inc

SOT23-5