

LM393LVQDRQ1

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

Manufacturer: <u>Texas Instruments, Inc</u>

Package/Case: SOIC-8

Product Type: Linear Displacement Sensors

RoHS: RoHS Compliant/Lead free RoHS

Lifecycle: Active



Images are for reference only

Inquiry

General Description

The LV device family consists of two (LM393LV -Q1), or four (LM339LV -Q1), independent voltage comparators that are designed to operate from a wide range of supply voltages. The LV devices can drop-in replace the standard LM2xx, LM3xx and LM290x -Q1 comparator family in low voltage ($\leq 5 \text{ V}$) applications for improved performance and added features.

The LV devices include a Power-On-Reset (POR) feature that ensures the output is in a High-Z state until the minimum supply voltage has been reached. This prevents output transients during system power-up and power-down.

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

The LV devices are specified for the temperature range of -40° C to $+125^{\circ}$ C, which covers the temperature ranges of all the LM2xx, LM3xx and LM290x -Q1 comparator families.

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 C5

1.65 V to 5.5 V supply range

Rail-to-Rail input with Failsafe

Low input offset voltage 400 µV typical

600ns typical propagation delay

Low quiescent current 25 µA/Ch typical

Low input bias current 5 pA typical

Open-drain output

Full -40°C to +125°C temperature range

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

2 kV ESD protection

Improved replacement for LM393 -Q1 & LM339 -Q1 family for V

CC

Recommended For You

LMB11MX LMV7219M5 LM348D

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

SOP8 SOT23-5 SOP-14

LM224N LM239J LMV331M5

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

DIP14 CDIP14 SOT23-5

LM393ADR LM293DR LM293D

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

SOP8 SOP8 SOP8

LMV824MTX

LMV358M

LMV321M5

Texas Instruments, Inc

Texas Instruments, Inc

Texas Instruments, Inc

TSSOP

SOP8

SOT23-5

LM741H

LM193AH

LM111H/NOPB

Texas Instruments, Inc

Texas Instruments, Inc

Texas Instruments, Inc

CAN8

CAN8

CAN8