

Current Limit SW 1-IN 1-OUT to 14A Automotive 8-Pin SO N T/R



Images are for reference only

[Inquiry](#)

Manufacturer: [STMicroelectronics, Inc](#)

Package/Case: SOP8

Product Type: Switches

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

General Description

The VN5E160MS-E is a single-channel high-side driver manufactured in the ST proprietary VIPower M0-5 technology and housed in the tiny SO-8 package. The VN5E160MS-E is designed to drive 12 V automotive grounded loads delivering protection, diagnostics and easy 3 V and 5 V CMOS compatible interface with any microcontroller.

The device integrates advanced protective functions such as load current limitation, inrush and overload active management by power limitation, overtemperature shut-off with auto-restart and overvoltage active clamp. A dedicated analog current sense pin is associated with every output channel in order to provide enhanced diagnostic functions including fast detection of overload and short-circuit to ground through power limitation indication and overtemperature indication. The current sensing and diagnostic feedback of the whole device can be disabled by pulling the CS_DIS pin high to allow sharing of the external sense resistor with other similar devices.

Key Features

General

Inrush current active management by power limitation

Very low standby current

3.0V CMOS compatible inputs

Optimized electromagnetic emission

Very low electromagnetic susceptibility

In compliance with the 2002/95/EC European directive

Very low current sense leakage

Diagnostic functions

Proportional load current sense

High-precision current sense for wide current range

Current sense disable

Overload and short to ground (power limitation) indication

Thermal shutdown indication

Protections

Undervoltage shutdown

Overvoltage clamp

Load current limitation

Self-limiting of fast thermal transients

Protection against loss of ground and loss of VCC

Overtemperature shutdown with auto restart (thermal shutdown)

Reverse battery protected

Electrostatic discharge protection

Recommended For You

VN5050JTR-E

STMicroelectronics, Inc

HSSOP12

VNLD5160TR-E

STMicroelectronics, Inc

SOP8

VND5T050AKTR-E

STMicroelectronics, Inc

SSOP24

VNS3NV04PTR-E

STMicroelectronics, Inc
SOP8

VN7003ALHIR

STMicroelectronics, Inc
Octapak-7

VND7140AJ12TR

STMicroelectronics, Inc
HSSOP12

VN330SP-E

STMicroelectronics, Inc
HSOP10

VNL5050N3TR-E

STMicroelectronics, Inc
SOT-223

VNB35NV04TR-E

STMicroelectronics, Inc
TO-263

VN7007AHIR

STMicroelectronics, Inc
TO252-7

VNV35N07

STMicroelectronics, Inc
HSOP10

VND5050AJTR-E

STMicroelectronics, Inc
HSSOP12

VND5E160AJTR-E

STMicroelectronics, Inc
HSSOP12

VNN7NV04PTR-E

STMicroelectronics, Inc
SOT223

VN7004CLHIR

STMicroelectronics, Inc
TO-252