

Current Limit SW 1-IN 1-OUT to 23A Automotive 12-Pin PowerSSO EP T/R



Images are for reference only

[Inquiry](#)

Manufacturer: [STMicroelectronics, Inc](#)

Package/Case: HSSOP12

Product Type: Switches

Lifecycle: Active

General Description

The VN5050AJ-E is a monolithic device made using STMicroelectronics VIPower technology. It is intended for driving resistive or inductive loads with one side connected to ground. Active VCC pin voltage clamp protects the device against low energy spikes (see ISO7637 transient compatibility table).

This device integrates an analog current sense which delivers a current proportional to the load current (according to a known ratio) when CS_DIS is driven low or left open.

When CS_DIS is driven high, the CURRENT SENSE pin is in a high impedance condition. Output current limitation protects the device in overload condition. In case of long overload duration, the device limits the dissipated power to safe level up to thermal shut-down intervention. Thermal shut-down with automatic restart allows the device to recover normal operation as soon as fault condition disappears.

Key Features

General features
 Inrush current active management by power limitation
 Very low stand-by current
 3.0V CMOS compatible input
 Optimized electromagnetic emission
 Very low electromagnetic susceptibility
 In compliance with the 2002/95/EC European directive

Protection
 Undervoltage shut-down
 Overvoltage clamp
 Load current limitation
 Self limiting of fast thermal transients
 Protection against loss of ground and loss of VCC
 Thermal shut down

Diagnostic functions
 Proportional load current sense
 High current sense precision for wide range currents
 Current sense disable
 Thermal shutdown indication
 Very low current sense leakage

Recommended For You

VN5050JTR-E

STMicroelectronics, Inc

HSSOP12

VNLD5160TR-E

STMicroelectronics, Inc

SOP8

VND5T050AKTR-E

STMicroelectronics, Inc

SSOP24

VNS3NV04PTR-E

STMicroelectronics, Inc

SOP8

VN7003ALHTR

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

VN7007AHTR

STMicroelectronics, Inc

TO252-7

VNV35N07

STMicroelectronics, Inc

HSOP10

VND5050AJTR-E

STMicroelectronics, Inc

HSSOP12

VND5E160AJTR-E

STMicroelectronics, Inc

HSSOP12

VNN7NV04PTR-E

STMicroelectronics, Inc

SOT223

VN7004CLHTR

STMicroelectronics, Inc

TO-252