High side smart power solid state relay

What is a solid-state relay?
Another important feature of solid-state relays is they are optically isolated. That means the relays use an LED or light emitting diode on their input side, MOSFETs or metal oxide semiconductor field effect transistors on their output side, and an array of photo sensors isolating the two.

How to choose a solid state relay?
The selection of a solid-state relay depends on the electrical,mechanical,and cost characteristicsof each device and the required application. A solid state relay circuit consists of an input circuit,a control circuit,and an output (load-switching) circuit.

What is a Smart Relay?
A smart relayis a device that can sense the room temperature and sunlight to turn on and off a fan and light bulb. You can monitor it from your mobile device. Create an account to leave a comment on this project at Hackaday.io.

March 2007 Rev 5 1/16 16 VN340SP-E Quad high side smart Power solid state relay Features Output current : 0.7A per channel Digital I/O"s clamped at 32V minimum voltage Shorted load and overtemperature protections Protection against loss of ground Built-in current limiter Undervoltage shut-down Open drain diagnostic output Fast demagnetization of ...

o Power GOOD open drain output o High common mode transient immunity o ESD protection o Designed to meet IEC 61000-4-2, IEC 61000- 4-4, IEC 61000-4-5 and IEC ... Galvanic isolated octal high side smart power solid state relay with SPI interface ISO8200AQ Datasheet DS12812 - Rev 7 - July 2021

Input Power Protection Smart High Side Switches Output Power Protection Product Families o Non-current / Current Limited o Power Mux o Solid State Relays Sectors/EE"s o Industrial PC cards o Industrial PCs o PLC, power sequencing Product Families o > 40V eFuse o < 30V eFuse o Hot Swap Controllers o Ideal Diode Controllers

High side smart power solid state relay Features Output current (continuous): 6A @ Tc=25°C 5V logic level compatible input Thermal shutdown Under voltage shutdown Open drain diagnostic output Very low standby power dissipation Description The VN02N is a monolithic device made using STMicroelectronics VIPower technology, intended

Quad high-side smart-power solid-state relay demonstration board based on the VNI4140K-32 . Recommended for you. Events and Seminars. PCIM Europe 2025 06 May - 08 May, 2025 . Related Applications. Industrial. Factory automation (1) Programmable logic controllers (PLC) (1) IO-Link modules

September 2013 Rev 4 1/16 16 VND05BSP Iso high side smart power solid state relay Features Output

current (continuous): 9A @ Tc=85°C 5V logic level compatible input Thermal shutdown Under voltage shutdown Open drain diagnostic output Inductive load fast demagnetization Very low standby power dissipation Description The VND05BSP is a ...

Designed for STM32 Nucleo and evaluates the IPS8200HQ octal high-side smart power relay. Designed to evaluate the driving and diagnostic capabilities of the IPS8200HQ-1 module. A broad range of drop-in ...

Octal high-side smart power solid-state relay with serial/parallel selectable interface on-chip VNI8200XP / VNI8200XP-32 Datasheet DS11044 - Rev 6 - February 2024 For further information contact your local STMicroelectronics sales office. VNI8200XP. VNI8200XP-32. VNI8200XP. VNI8200XP-32

In= Nominal current according to ISO definition for high side automotive switch. The Nominal Current is the current at T c = 85 °C for battery voltage of 13V which produces a voltage drop ...

The IPS8200HQ and IPS8200HQ -1 are monolithic 8-channel drivers, designed using STMicroelectronics(TM) VIPower(TM) technology, and intended to drive any kind of load with one ...

high side smart power solid state relay july 1998 type vdss rds(on) in(*) vcc vn06sp 60 v 0.18 ? 1.9 a 26 v maximum continuous output current (#):9 a @ t c=85 oc 5 v logic level compatible input thermal shut-down under voltage protection open drain diagnostic output inductive load fast demagnetization very low stand-by power dissipation

Quad high-side smart power solid-state relay Datasheet -production data Features o Output current: 0.7 A per channel o Shorted load protections o Junction overtemperature protection o Case overtemperature protection for thermal independence of the channels o Thermal case shutdown restart not simultaneous for the various channels

quad high side smart power solid state relay february 1999 1 10 powerso-10tm block diagram type vdemag*rds(on)*iout *vcc vn330sp vcc-55v 0.32?** 0.7 a 36 v outputcurrent: 0.7a perchannel digital inputs clampedat 32v minimumvoltage shorted loadand overtemperature protections built-in current limiter undervoltage shut down

Quad high-side smart power solid state-relay Datasheet -production data Features o Output current: 0.7 A per channel o Digital I/O clamped at 32 V minimum voltage o Shorted load and overtemperature protections o Protection against loss of ground o Built-in current limiter o Undervoltage shutdown o Open drain diagnostic output

HQ - Octal high-side smart power solid-state relay with serial/parallel selectable interface on-chip, IPS8200HQ, STMicroelectronics The IPS8200HQ and IPS8200HQ -1 are monolithic 8-channel drivers, designed using STMicroelectronics(TM) VIPower ...

power supply in case of shorted load. Built-in thermal shutdown protects the chip from overtemperature and short-circuit. The open drain diagnostic output indicates overtemperature conditions. Product status link VN330SP-E Product label Quad high-side smart power solid-state relay VN330SP-E Datasheet DS4361 - Rev 5 - May 2022

High side smart power solid state relay Features Output current (continuous): 13A @ Tc=25°C 5V logic level compatible input Thermal shutdown Under voltage shutdown Open drain diagnostic output Very low standby power dissipation Description The VN05N is a monolithic device made using STMicroelectronics VIPower technology, intended

Quad high-side smart power solid-state relay Datasheet -production data Features o Output current: 1 A per channel o Shorted load protections o Junction overtemperature protection o Case overtemperature protection for thermal independence of the channels o Thermal case shutdown restart not simultaneous for the various channels

vn31sp high side smart power solid state relay september 2013 block diagram type vdss rds(on) in(*) vcc vn31sp 60 v 0.03 ? 11.5 a 26 v maximum continuous output current (#):31 a @ t c=85 oc 5 v logic level compatible input thermal shut-down under voltage protection open drain diagnostic output inductive load fast demagnetization

It contains 2 independent galvanic isolated voltage domains (V cc for the power stage and V dd for the digital stage). Additional embedded functions are: loss of GND protection, undervoltage ...

Web: https://bardzyndz