Product Brief



BTS 3410G

HITFET®

Smart Low-Side Power Switch Two Channel 200 m Ω

THE BTS 3410G is a two channel low-side power switch. Each channel has an on resistance of 200 m Ω .

BTS 3410G and BSP 76 are both 200 m Ω devices. The BTS 3410G uses two times the silicon from BSP 76. Both chips are included into the tiny P-DSO-8 package. This helps you to save PCB board space area compared to two times the BSP 76.

THE DEVICE was developed to fulfill automotive requirements. Therefore the BTS 3410G is equipped with the proven HITFET protection functions.

The device is protected against:

Short circuit: to protect the device and circuitry during

short of the load

Overtemperature: for handling overload situations and bad

cooling conditions

Overvoltage: for switching inductive loads and to protect

against load dump

■ ESD: for easier handling during production and

maintenance

THE DEVICE also has embedded status feedback functionality. In the case of overtemperature or short circuit switch off the input pin sinks increased current. The increased current can be measured by a micro controller and action can be taken.

Basic Functions

- Two channel each 200 m Ω
- Current limitation
- Low input current
- Analog driving possible

Protective Functions

- Short circuit protection
- Thermal shutdown with latch
- Active clamp over voltage protection
- Electrostatic discharge protection (ESD)

Fault Information

- Short circuit
- Thermal shutdown

Applications

- Especially suitable for driving relays
- All types of resistive, inductive and capacitive loads

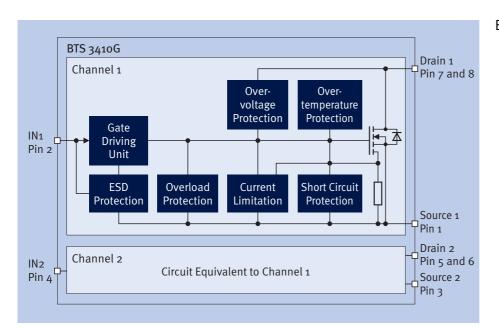
Benefits

- Very low quiescent current
- High inrush current possible
- EMC optimized switching
- All application relevant protection included in the device

www.infineon.com/hitfet

Automotive Power

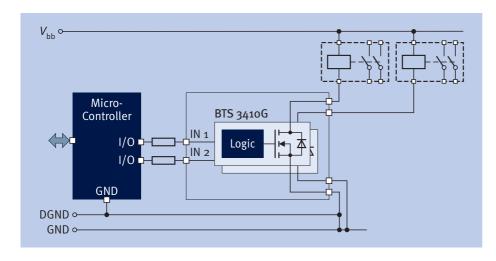




Block Diagram

Parameter	Symbol	Value
Sales Code		Please contact Infineon Sales
Package		P-DSO-8
Drain Voltage Internal Clamped	$V_{ extsf{DS}}$	42 V
Input Voltage	$V_{\rm IN,max}$	10 V
ON-State Resistance	R _{DS(ON,max)@25°C}	2 X 200 mΩ
Nominal Load Current	/ _{Dnom}	2 X 1 A
Drain Current Internal Limited	/ _{Dlim,min}	2 X 5 A
Clamping Energy	E _{AS@1.4A}	2 X 150 mJ
Leakage Current MOSFET	/ _{DSS}	2 x 10 μA

Product Summary



Application Example Relay Driving

How to reach us: http://www.infineon.com

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