



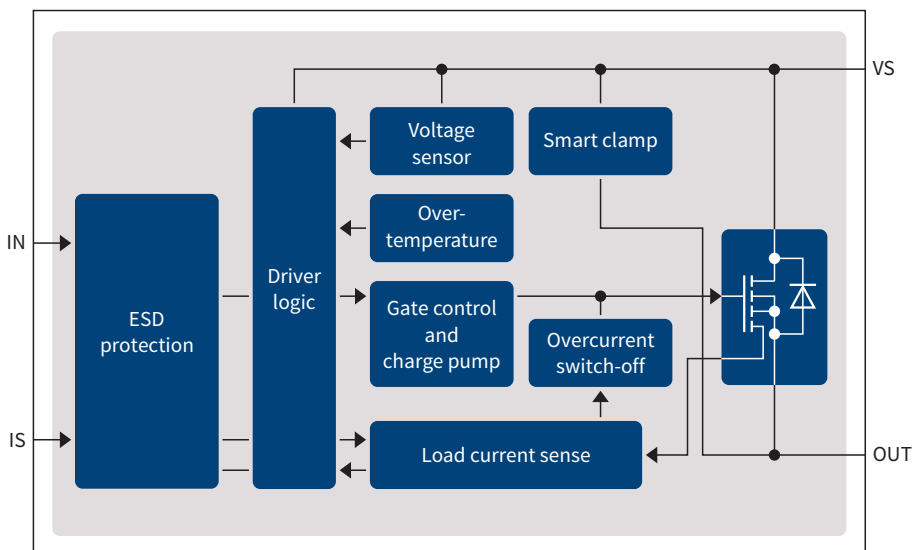
## Product brief

# BTS50025-1TEA

The lowest  $R_{DS(on)}$  in DPAK

The BTS50025-1TEA is a 2.5 mΩ single channel Smart High-Side Power Switch, providing protective functions and diagnosis. It contains Infineon® ReverSave™ functionality. The power transistor is built by an N-channel MOSFET with charge pump. It is specially designed to drive high current loads up to 60 A, for application like heaters, glow plugs, fan and pump in the harsh automotive environment. Embedded in a TO-252-5-11 package, the BTS50025-1TEA is specially suitable for loads with high inrush current.

### Block diagram



### Key features

- > 2.5 mΩ high-side switch with integrated protection features
- > Operating voltage range 3.1 ... 27 V
- > Protection: short-circuit and overtemperature
- > Load dump protection up to 45 V
- > Diagnosis: load current sense output
- > Reverse battery protection

### Key benefits

- > Fully integrated solution
- > Power package with good thermal performance
- > Outstanding current sense accuracy < 3.5 percent after calibration
- > Very low offset on the current sense: ±150 mA on the load current.

### Key applications

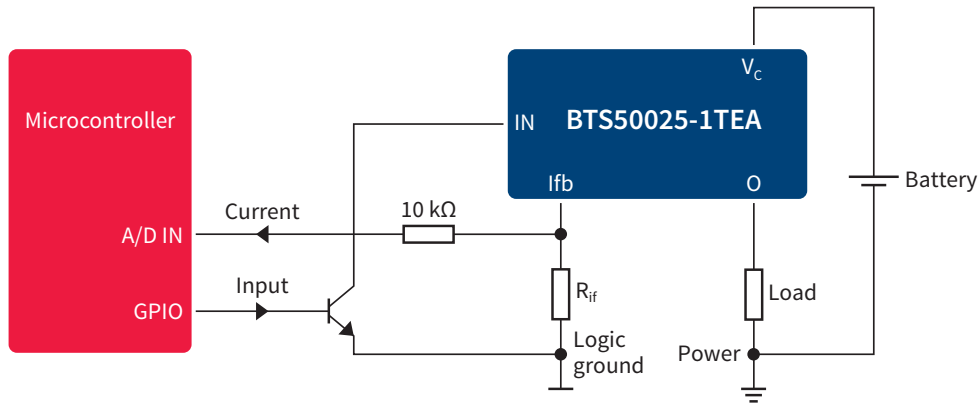
- > Glow plugs, PTC
- > Fan, pump
- > Starter relay



# BTS50025-1TEA

The lowest  $R_{DS(on)}$  in DPAK

## Application diagram



## Product table

Product name	$R_{DS(on)}$ (typ) @ 25°C [mΩ]	$R_{DS(on)}$ (max) @ 150°C [mΩ]	$I_{trip}$ (min) [A]	Diagnosis	Package
BTS50025-1TEA	2.5	5	60	Current sense	TO252-5 (DPAK)

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