

WSTD723GW

Smart High-Side Power Switch Dual Channel, 70mΩ, SOP-14L, AEC-Q100 qualified

Application

- ◆ Suitable for resistive, inductive and capacitive loads
- ◆ Replaces electromechanical relays, fuses and discrete circuits
- ◆ Most suitable for loads with high inrush current, such as lamps
- ◆ Suitable for 12 V and 24 V trucks + trailer and transportation systems

Basic Features

- ◆ Dual channel device
- ◆ Very low stand-by current
- ◆ 3.3 V and 5 V compatible logic inputs
- ◆ Optimized electromagnetic compatibility
- ◆ Fast switching device
- ◆ Wide operating voltage range



Diagnostic Functions

- ◆ Diagnostic feedback with open drain output and integrated pull up resistors
- ◆ Off-state open load detection
- ◆ OUT short to VS detection
- ◆ Feedback of Thermal shutdown in ON-state
- ◆ Diagnostic feedback of both channels works properly in case of inverse current



Protection Functions

- ◆ Undervoltage shutdown
- ◆ Overvoltage clamp
- ◆ Load current limitation
- ◆ Self limiting of fast thermal transients
- ◆ Thermal shutdown
- ◆ Protection against loss of ground and loss of Vbb
- ◆ Reverse battery protection with external resistor
- ◆ Electrostatic discharge protection

Product Summary

Parameter	Symbol	Value
Max. transient supply voltage	V _s	60V
Operating voltage range	V _{NOM}	7-58V
On-state resistance (per channel, T _j = 25°C)	R _{ON}	70mΩ
On-state resistance (two channels parallel, T _j = 25°C)		35mΩ
Nominal load current (one channel active, T _j = 25°C)	I _{L(NOM)1}	4A
Nominal load current (All channels active, T _j = 25°C)	I _{L(NOM)2}	6A
Current limitation (per channel)	I _{LIMH}	12A
Supply current in sleep	I _{SLEEP}	6uA

