

**WSTQ724G****Smart High-Side Power Switch Quad Channel, 80mΩ, 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**

- ◆ Quad channel device
- ◆ Very low stand-by current
- ◆ 3V and 5 V compatible logic inputs
- ◆ Optimized electromagnetic compatibility
- ◆ Very low electromagnetic susceptibility

**Diagnostic Functions**

- ◆ Open load detection in OFF-state
- ◆ Output short to V<sub>bb</sub> detection
- ◆ Feedback of thermal shutdown in ON-state

**Protection Functions**

- ◆ Undervoltage shutdown
- ◆ Overvoltage clamp
- ◆ Load current limitation
- ◆ Self limiting of fast thermal transients
- ◆ Protection against loss of ground and loss of V<sub>bb</sub>
- ◆ Thermal shutdown
- ◆ Electrostatic discharge protection

**Product Summary**

Parameter	Symbol	Value
Max. transient supply voltage	V <sub>bb</sub>	58V
Operating voltage range	V <sub>NOM</sub>	5-40V
On-state resistance (per channel)	R <sub>ON</sub>	80mΩ
Nominal load current (one channel active)(T <sub>A</sub> =25°C)	I <sub>L(NOM)1</sub>	3A
Nominal load current (All channels active)(T <sub>A</sub> =25°C)	I <sub>L(NOM)2</sub>	8A
Current limitation(per channel)	I <sub>LIMH</sub>	12A
Supply current in sleep	I <sub>SLEEP</sub>	3uA

