

GLF1200Q / GLF1201Q Nano Current Power I_QSmart™ Switch with True Reverse Current Blocking

DESCRIPTION

The GLF1200Q / GLF1201Q is an advanced technology fully integrated I_QSmart™ load switch device with True Reverse Current Blocking (TRCB) technology and the slew rate control of the output voltage. The best in class efficiency makes it an ideal choice for electronics requiring operation under the high temperature up to 125 °C.

The GLF1200Q / GLF1201Q offers an industry leading True Reverse Current Blocking (TRCB) performance, featuring an ultra-low threshold voltage. It minimizes reverse current flow in an event that the V_{OUT} pin voltage exceeds the V_{IN} voltage.

An integrated slew rate control can also enhance system reliability by mitigating bus voltage swings during switching events. Where uncontrolled switches can generate high inrush currents that result in voltage droop and/or bus reset events, the GLF slew rate control specifically limits inrush currents during turn-on to minimize voltage droop.

The GLF1200Q / GLF1201Q load switch device supports an industry leading wide input voltage range and helps to improve operating life and system robustness. Furthermore, one device can be used in multiple voltage rail applications which helps to simplify inventory management and reduces operating cost.

FEATURES

- AEC-Q100 Qualified
- Qualified for Automotive Applications:
Temperature Grade 1: Ambient Operating
Temperature Range, -40 °C ~ +125 °C
- Wide Input Range: 1.5 V to 5.5 V
6 V abs max
- True Reverse Current Blocking
- R_{ON}: 60 mΩ Typ @ 5.5 V_{IN}
- I_{OUT} Max: 2 A
- Ultra-Low I_Q: 0.48 uA Typ @ 5.5 V_{IN}
- Ultra-Low I_{SD}: 25 nA Typ @ 5.5 V_{IN}
- Controlled Rise Time: 600 us at 3.3V_{IN}
- Internal EN Pull-Down Resistor on
- ESD Performance Tested per AEC Q100
HBM: 4 kV, CDM: 2 kV
- Moisture Sensitivity Level: MSL-3 and 260°C
Peak Reflow Temp
- Lead-free, Halogen-free, and Adhere to
RoHS Directive

PRODUCT TABLE

Eval Board Ordering Infor	Part Number	Top Mark	TRCB	R _{ON} (Typ) at 5.5 V	Output Discharge	EN Activity	Availability
EV021-GLF1200Q	GLF1200Q	DM	Yes	54 mΩ	NA	High	Released
EV021-GLF1201Q	GLF1201Q	DN		54 mΩ	85 Ω	High	In Dev