

GLF72120, GLF72122 4A Slew Rate Controlled I_QSmart™ Load Switch With True Reverse Current Blocking

DESCRIPTION

The GLF72120 and GLF72122 are 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. They offer industry leading True Reverse Current Blocking (TRCB) performance, featuring an ultra-low threshold voltage. It minimizes reverse current flow in the event that the V_{OUT} pin voltage exceeds the V_{IN} voltage.

The GLF72120 and GLF72122 have industry leading efficiency. It features a 14 mΩ R_{ON} typical at 5.5 V, reducing power loss during conduction. The device also features ultra-low shutdown current (I_{SD}) to reduce power loss and battery drain in the off state. When EN is pulled low, and the output is grounded, the GLF72120 and GLF72122 can achieve an I_{SD} as low as 56 nA typical at 5.5 V.

The GLF72120 and GLF72122 load switch device support 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.

The GLF72120 and GLF72122 load switch device are in a 0.97 mm x 1.47 mm x 0.55 mm chip scale package with 6 bumps and a 0.5 mm pitch.

FEATURES

- True Reverse Current Blocking
- Low R_{ON}: 14 mΩ Typ at 5.5 V_{IN}
- Ultra-Low I_Q: 1.3 μA Typ at 5.5 V_{IN}
- Ultra-Low I_{SD}: 56 nA Typ at 5.5 V_{IN}
- I_{OUT} Max: 4 A
- Supply Voltage Range: 1.5 V to 5.5 V
6 V_{abs} max
- Controlled V_{OUT} Rise Time
GLF72120: 730 μs at 3.3 V_{IN}
GLF72122: 2000 μs at 3.3 V_{IN}
- Internal EN Pull-Down Resistor
- 0.97 mm x 1.47 mm x 0.55 mm Wafer Level Chip Scale Package

PRODUCT TABLE

Part Number	Top Mark	VOUT Rising Time, Tr Typ [μ s] at 3.3 VIN	EN Activity	Tape and Reel Packaging
GLF72120	RA	730	High	3000 Pieces on 7 inch reel
GLF72122	RC	2000		