

GLF1110

Nano-Current Power I_QSmart[™] Load Switch

Product Brief

DESCRIPTION

The GLF1110 is an ultra-efficiency, 2 A rated, Load Switch with integrated slew rate control. The best in class efficiency makes it an ideal choice for use in IoT, mobile, and wearable electronics.

The GLF1110 features ultra-efficient I_QSmart^{TM} technology that supports the lowest quiescent current (I_Q) and shutdown current (I_{SD}) in the industry. Low I_Q and I_{SD} solutions help designers to reduce parasitic leakage current, improve system efficiency, and increase battery lifetime.

The 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 GLF1110 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 reduce operating cost.

FEATURES

• Wide Input Range: 1.5 V to 5.5 V

6 V abs max

• R_{ON}: 54 mΩ Typ @ 5.5 V_{IN}

• I_{OUT} Max: 2 A

Ultra-Low I_Q: 2 nA Typ @ 5.5 V_{IN}
Ultra-Low I_{SD}: 13 nA Typ @ 5.5 V_{IN}

• Controlled Rise Time: 600 µs at 3.3 V_{IN}

• Internal EN Pull-Down Resistor

• Wide Operating Temperature Range:

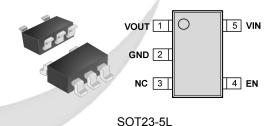
-40 °C ~ 85 °C

• HBM: 4 kV, CDM: 2 kV

APPLICATIONS

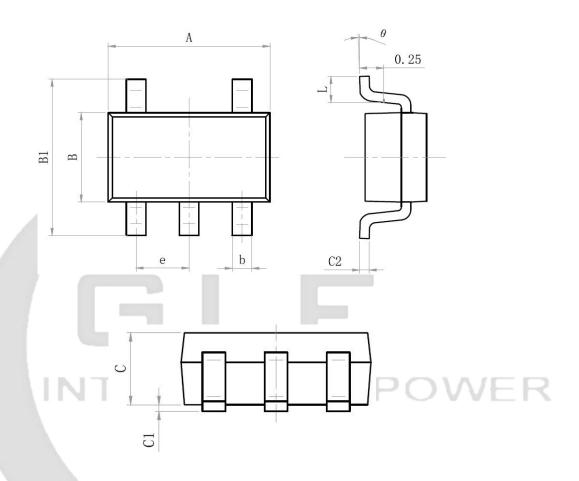
- Telecommunication Module
- Low Power Subsystem
- Mobile Devices

PACKAGE





PACKAGE OUTLINE



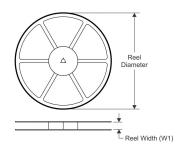
| Size | Min(mm) | Max(mm) | Size Mark | Min(mm) | Max(mm) | | |
|------|---------|----------|--------------|---------|----------------------|--|--|
| A | 2.82 | 3.02 | С | 1.05 | 1. 15 | | |
| е | 0.9 | 95 (BSC) | C1 | 0.03 | 0.15 | | |
| b | 0.28 | 0.45 | C2 | 0.12 | 0. 23 0. 55 8° | | |
| В | 1.50 | 1.70 | L | 0.35 | | | |
| B1 | 2.60 | 3.00 | θ | 0° | | | |

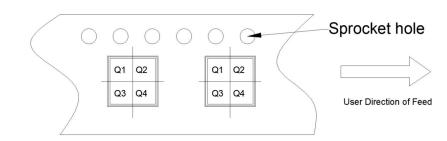


TAPE AND REEL INFORMATION

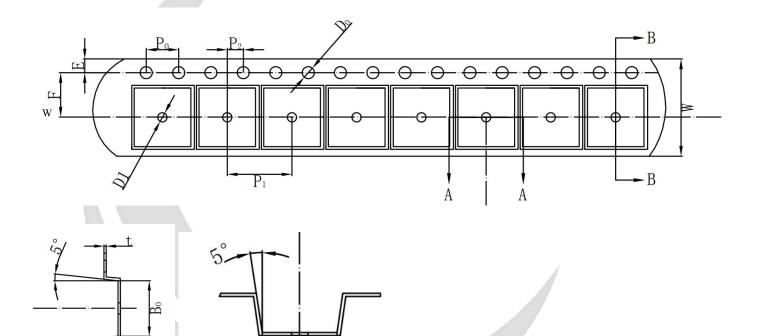
REEL DIMENSIONS

QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE





TAPE DIMENSIONS



| Device | Package | Pins | SPQ | Reel Diameter(mm) | Reel Width W1 | Α0 | В0 | K0 | P1 | w | Pin1 |
|--------------|---------|------|------|-------------------|------------------|------|------|------|----|---|------|
| GLF1110-T1G7 | SOT23-5 | 5 | 3000 | 178 | 9 | 3.25 | 3.30 | 1.38 | 4 | 8 | Q3 |

Remark:

- A0: Dimension designed to accommodate the component width
- B0: Dimension designed to accommodate the component length
- C0: Dimension designed to accommodate the component thickness
- W: Overall width of the carrier tape
- P1: Pitch between successive cavity centers