

GLF71302

Nano-Current Consumed, I_QSmart[™] LoadSwitch with Slew Rate Control

Product Brief

DESCRIPTION

The GLF71302 is an ultra-efficiency, 2.0 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 GLF71302 features an 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 GLF71302 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 current during turn-on to minimize voltage droop.

The GLF71302 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.

The GLF71302 Load Switch device is small utilizing a wafer level chip scale package with 4 bumps in a 0.77 mm x 0.77 mm x 0.46 mm die size and a 0.4 mm bump pitch.

FEATURES

• Ultra-Low I_Q: 540 nA Typ @ 5.5 V_{IN}

Ultra-Low I_{SD}: 19 nA Typ @ 5.5 V_{IN}
Low R_{ON} = 34 mΩ Typ. @ 5.5 V_{IN}

• Iout Max = 2.0 A

Wide Input Range: 1.1 V to 5.5 V

6 Vabs max

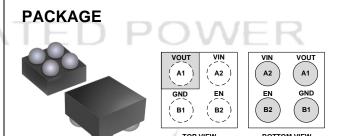
Controlled Rise Time: 430 us at 3.3 V_{IN}

• Internal EN Pull-Up Resistor

Ultra-Small: 0.77 mm x 0.77 mm

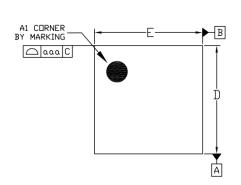
APPLICATIONS

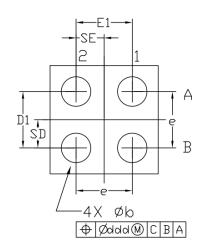
- Wearables
- Data Storage, SSD
- Mobile Devices
- Low Power Subsystems

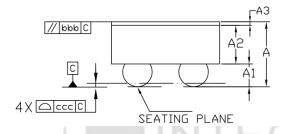


0.77 mm x 0.77 mm x 0.46 mm WLCSP

PACKAGE OUTLINE







| Dimensional Ref. | | | | | | | | | |
|-----------------------|--------------|-------|-------|--|--|--|--|--|--|
| REF. | Min. | Nom. | Max. | | | | | | |
| Α | 0.410 | 0.460 | 0.510 | | | | | | |
| Α1 | 0.135 | 0.160 | 0.185 | | | | | | |
| Α2 | 0.250 | 0.275 | 0.300 | | | | | | |
| Α3 | 0.020 | 0.025 | 0.030 | | | | | | |
| D | 0.755 | 0.770 | 0.785 | | | | | | |
| Ε | 0.755 | 0.770 | 0.785 | | | | | | |
| D1 | 0.350 | 0.400 | 0.450 | | | | | | |
| E1 | 0.350 | 0.400 | 0.450 | | | | | | |
| Ь | 0.170 | 0.210 | 0.250 | | | | | | |
| e 0.400 BSC | | | | | | | | | |
| SD | SD 0.200 BSC | | | | | | | | |
| SE | | | | | | | | | |
| Tol. of Form&Position | | | | | | | | | |
| ааа | 0.10 | | | | | | | | |
| ЬЬЬ | Ь 0.10 | | | | | | | | |
| CCC | cc 0.05 | | | | | | | | |
| ddd | ddd 0.05 | | | | | | | | |

RATED POWER

Notes

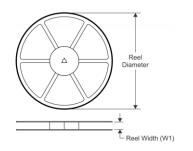
- 1. ALL DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGRESS)
- 2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.
- 3. A3: BACKSIDE LAMINATION

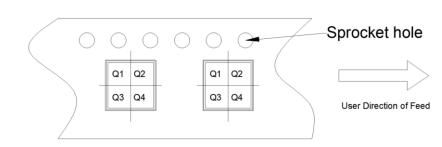
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TAPE AND REEL INFORMATION

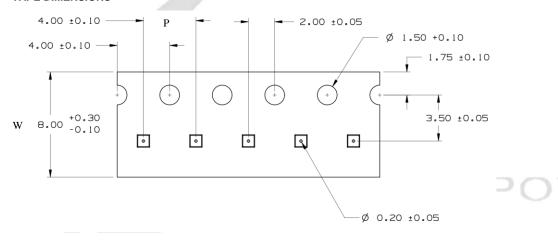
REEL DIMENSIONS

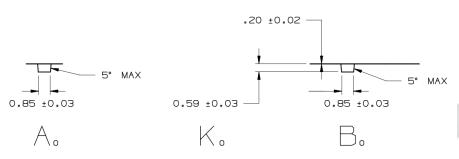
QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE





TAPE DIMENSIONS





| Device | Package | Pins | SPQ | Reel Diameter(mm) | Reel Width W1 | Α0 | В0 | K0 | Р | w | Pin1 |
|----------|---------|------|------|-------------------|------------------|------|------|------|---|---|------|
| GLF72102 | WLCSP | 4 | 4000 | 180 | 9 | 0.85 | 0.85 | 0.59 | 4 | 8 | Q1 |

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
- P: Pitch between successive cavity centers

单击下面可查看定价,库存,交付和生命周期等信息

>>GLF(杰夫微)