

Nano-Current Consumed, IoSmart™ Load Switch with Slew Rate Control

DESCRIPTION

The GLF71308 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 GLF71308 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 GLF71308 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 GLF71308 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 GLF71308 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:
 1 nA Typ @ 5.5
- Ultra-Low I_{SD}: 19 nA Typ @ 5.5 V_{IN}
- Low $R_{ON} = 34 \text{ m}\Omega \text{ Typ.} @ 5.5 \text{ V}_{IN}$
- I_{OUT} Max = 2.0 A
- Wide Input Range: 1.1 V to 5.5 V
 6 Vabs max
- Controlled Rise Time:
 42 us at 3.3V_{IN}
- Internal EN Pull-Down Resistor
- Integrated Output Discharge Switch
- Ultra-Small: 0.77 mm x 0.77 mm

TED POWER

APPLICATIONS

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

PACKAGE



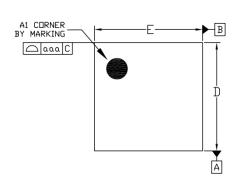


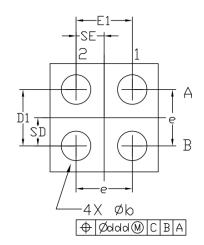


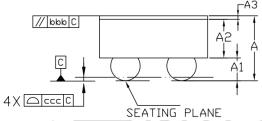
0.77 mm x 0.77 mm x 0.46 mm WLCSP



PACKAGE OUTLINE







Dimensional Ref.								
REF.	Min.	Nom.	Max.					
Α	0.410	0.460	0.510					
Α1	0.135	0.160	0.185					
A2	0.250	0.275	0.300					
А3	0.020	0.025	0.030					
D	0.755	0.770	0.785					
Е	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					
е	0.400 BSC							
SD	0.200 BSC							
SE	0.200 BSC							
Tol. of Form&Position								
aaa	0.10							
ЬЬЬ	0.10							
ССС	0.05							
ddd	0.05							

GRAIED POWER

Notes

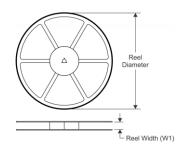
- 1. ALL DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGRESS)
- 2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.
- 3. A3: BACKSIDE LAMINATION

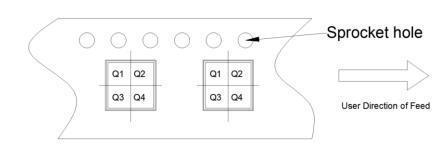
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TAPE AND REEL INFORMATION

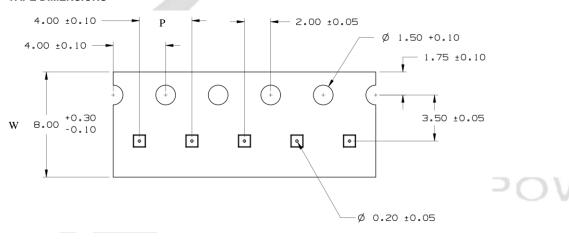
REEL DIMENSIONS

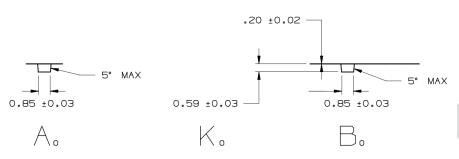
QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE





TAPE DIMENSIONS





Device	Package	Pins	SPQ	Reel Diameter(mm)	Reel Width W1	Α0	В0	K0	Р	w	Pin1
GLF71308	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