GLF71311



Nano-Current Consumed I_QSmart[™] Power Load Switch with Slew Rate Control

Product Specification

DESCRIPTION

The GLF71311 is an ultra-efficiency, 3 A rated, load switch with integrated slew rate control. The best in class efficiency makes it an ideal chose for use in IoT, mobile, and wearable electronics.

The GLF71311 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 GLF71311 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 GLF71311 slew rate control specifically limits inrush currents during turn-on to minimize voltage droop.

GLF71311 Load Switch devices 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 reduce operating cost.

GLF71311 Load Switch device is small utilizing a chip scale package with 4 bumps in a 0.97 mm x 0.97 mm x 0.55 mm die size and a 0.5 mm bump pitch.

FEATURES

• Ultra-Low I_Q : 7 nA Typ at 5.5 V_{IN} • Ultra-Low I_{SD} : 28 nA Typ at 5.5 V_{IN} • Low R_{ON} : 31 m Ω Typ at 5.5 V_{IN}

• Іоит Мах: 3 А

• Wide Input Range: 1.1 V to 5.5 V

6 V_{abs} max

• Controlled Rise Time: 335 µs at 3.3 V_{IN}

• Internal EN Pull-Down Resistor

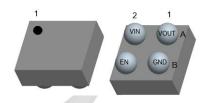
Integrated Output Discharge Switch

• Ultra-Small: 0.97 mm x 0.97 mm

APPLICATIONS

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

PACKAGE



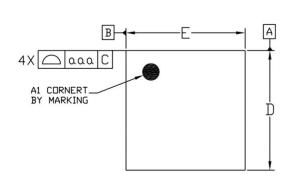
0.97 mm x 0.97 mm x 0.55 mm WLCSP

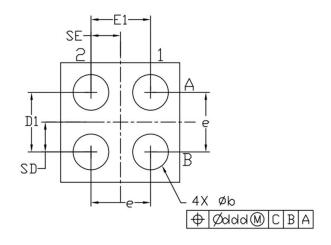
ALTERNATE DEVICE OPTIONS

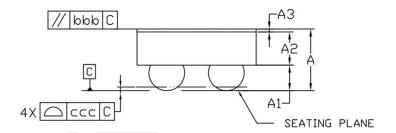
Rev.K, Dec. 2023

Part Number	Top Mark	R _{on} (Typ) at 5.5 V	Output Discharge	EN Activity	Availability	
GLF71311	ВС	31 mΩ	85 Ω	High	Released	

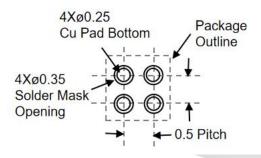
PACKAGE OUTLINE







Recommended Footprint



Dimensional Ref.								
REF.	Min.	Nom.	Max. 0.600 0.275 0.300 0.030 0.985 0.985 0.550					
Α	0.500	0.550						
Α1	0.225	0.250						
A2	0.255	0.275						
А3	0.020	0.025						
D	0.960	0.970						
Ε	0.960	0.970						
D1	0.450	0.500						
E1	0.450	0.500	0.550					
Ь	0.260	0.310	0.360					
е	0.500 BSC							
SD	0	0.250 BSC						
SE 0.250 BSC								
Tol. of Form&Position								
aaa	aaa 0.10							
ЬЬЬ	obb 0.10							
ccc	cc 0.05							
ddd	ddd 0.05							

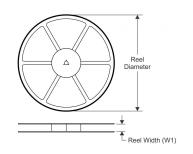
Notes

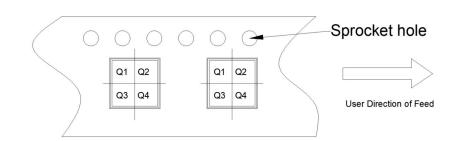
- 1. ALL DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREE)
- 2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.
- 3. A3: BACKSIDE LAMINATION

TAPE AND REEL INFORMATION

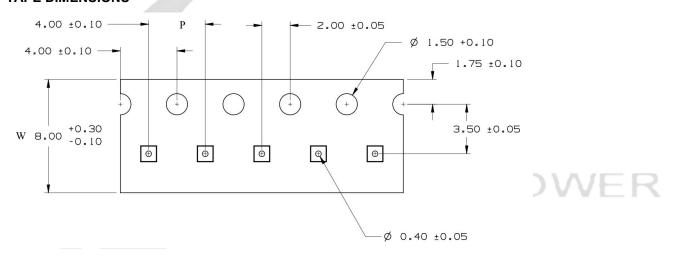
REEL DIMENSIONS

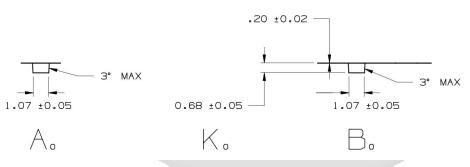
QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE





TAPE DIMENSIONS





Device	Package	Pins	SPQ	Reel Diameter (mm)	Reel Width W1	A0	В0	K0	Р	W	Pin1
GLF71311	WLCSP	4	3000	180	9	1.07	1.07	0.68	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