

# GLF72120 4 A, Slew Rate Controlled I<sub>Q</sub>Smart<sup>™</sup> Load Switch with True Reverse Current Blocking

Product Brief

#### DESCRIPTION

The GLF72120 is an advanced technology fully integrated  $I_QSmart^{TM}$  load switch device with True Reverse Current Blocking (TRCB) technology and the slew rate control of the output voltage.

The GLF72120 offers industry leading True Reverse Current Blocking (TRCB) performance, featuring an ultra-low threshold voltage. It minimizes reverse current flow in the event that the VOUT pin voltage exceeds the VIN voltage.

The GLF72120 has industry leading efficiency. It features a  $R_{\text{ON}}$  as low as 14 m  $\Omega$  typical at 5.5 V, reducing power loss during conduction. The device also features ultra-low shutdown current ( $I_{\text{SD}}$ ) to reduce power loss and battery drain in the off state. When EN is pulled low, and the output is grounded, the GLF72120 can achieve an  $I_{\text{SD}}$  as low as 40 nA typical at 5.5 V.

The GLF72120 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 GLF72120 load switch device is small utilizing a chip scale package with 6 bumps in a 0.97 mm x 1.47 mm x 0.55 mm die size and a 0.5 mm pitch.

#### **FEATURES**

True Reverse Current Blocking

• Low  $R_{ON}$ : 14 m $\Omega$  Typ @ 5.5  $V_{IN}$ 

• Ultra-Low IQ: 1.3uA Typ @ 5.5 VIN

Ultra-Low I<sub>SD</sub>: 40nA @ 5.5 VIN

I<sub>OUT</sub> Max : 4 A

• Supply Voltage Range: 1.5 V to 5.5 V

6 Vabs max

Controlled Rise Time: 730 us at 3.3 V<sub>IN</sub>

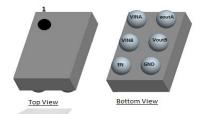
• Internal EN Pull-Down Resistor

 0.97 mm x 1.47 mm x 0.55 mm Wafer Level Chip Scale Package

## **APPLICATIONS**

- Mobile Devices
- Wearables
- Low Power Subsystems

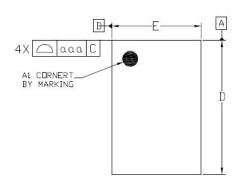
#### **PACKAGE**

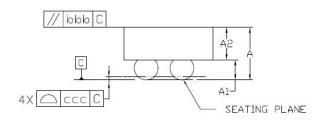


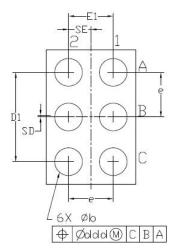
0.97 mm x 1.47 mm x 0.55 mm WLCSP

# GLF72120 4 A, I<sub>Q</sub>Smart<sup>™</sup> Load Switch with TRCB

## **PACKAGE OUTLINE**







Dimensional Ref.										
REF.	Min.	Nom.	Max.							
Α	0.500	0.550	0.600							
A1	0.225	0.250	0.275							
A2	0.275	0.300	0.325							
D	1.460	1.470	1.485							
Ε	0.960	0.970	0.985							
D1	0.950	1.000	1.050							
E1	0.450	0.500	0.550							
Ь	0.260	0.310	0.360							
e 0.500 BSC										
SD	0.000 BSC									
SE	SE 0.250 BSC									
Tol. of Form&Position										
999	aaa 0.10									
ььь	bbb 0.10									
CCC	ccc 0.05									
ddd	ddd 0.05									

#### Notes

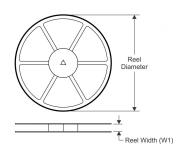
- 1, ALL DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES).
- 2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.

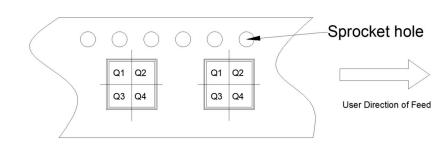
## GLF72120 4 A, I<sub>Q</sub>Smart<sup>™</sup> Load Switch with TRCB

## TAPE AND REEL INFORMATION

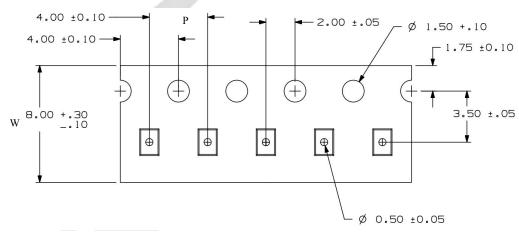
#### **REEL DIMENSIONS**

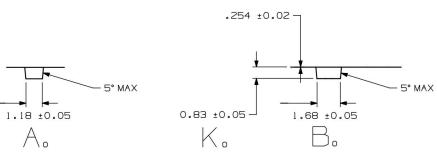
#### **QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE**





#### **TAPE DIMENSIONS**





Device	Package	Pins	SPQ	Reel Diameter(mm)	Reel Width W1	A0	В0	K0	Р	w	Pin1
GLF72120	WLCSP	6	3000	180	9	1.18	1.68	0.83	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