

# **GLF82321**

# I<sub>Q</sub>Smart<sup>™</sup> Power Load Switch with True Reverse Current Blocking

**Product Specification** 

### **DESCRIPTION**

The GLF82321 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 GLF82321 offers industry leading True Reverse Current Blocking (TRCB) performance, featuring an ultra-low threshold voltage. It prevents a reverse current from Vout to Vin all the time when the output voltage exceeds the input voltage.

The GLF82321 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 GLF82321 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.

### **FEATURES**

Supply Voltage Range: 2.0 V to 7.0 V
7.5 Vabs max

• Іоит Мах: 2 A

• Low  $R_{ON}$ : 40 m $\Omega$  Typ @ 7.0  $V_{IN}$ 

• Ultra-Low I<sub>Q</sub>: 1.8  $\mu$ A Typ @ 7.0 V<sub>IN</sub>

 $\bullet$  Ultra-Low I<sub>SD</sub>: 25 nA Typ @ 7.0 V<sub>IN</sub>

• Controlled Rise Time: 2.6 ms at 6.0 V<sub>IN</sub>

• True Reverse Current Blocking

Smart Enable Pin

 $I_{EN}$ : 3 nA Typ at  $V_{EN} > V_{IH}$ R<sub>EN</sub>: 500 k $\Omega$  Typ at  $V_{EN} < V_{IL}$ 

- Integrated Output Discharge Switch
- Wide Operating Temperature Range:

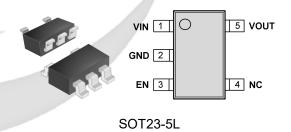
-40 °C ~ 85 °C

• HBM: 6 kV, CDM: 2 kV

## **APPLICATIONS**

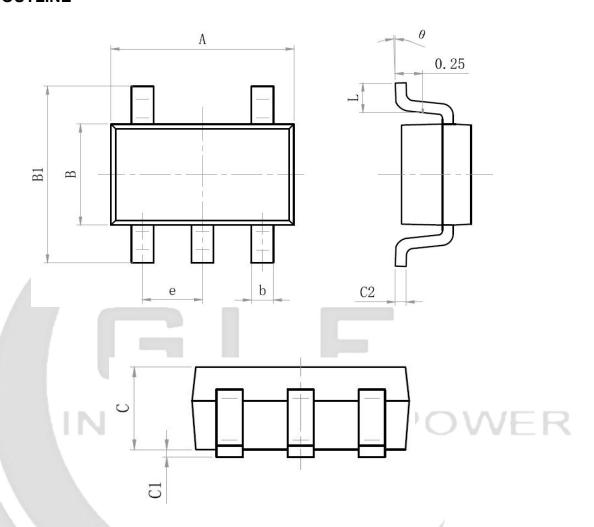
- Smart IoT Devices
- Low Power Subsystems

### **PACKAGE**





# **PACKAGE OUTLINE**



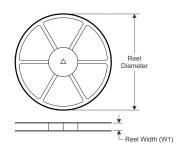
Size	Min(mm)	Max(mm)	Size Mark	Min(mm)	Max(mm)		
A	2.82	3.02	С	1.05	1. 15		
е	0.9	95 (BSC)	C1	0.03	0.15		
b	0.28	0.45	C2	0.12	0. 23		
В	1.50	1. 70	L	0.35	0.55		
B1	2.60	3.00	θ	0°	8°		

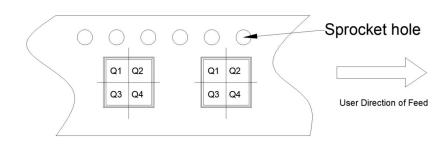


## TAPE AND REEL INFORMATION

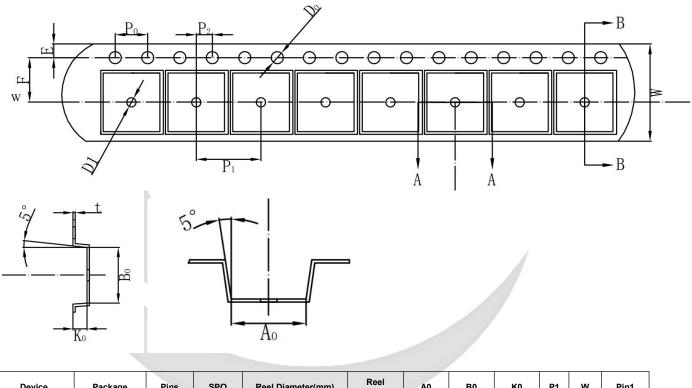
### **REEL DIMENSIONS**

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





#### **TAPE DIMENSIONS**



Device	Package	Pins	SPQ	Reel Diameter(mm)	Reel Width W1	A0	В0	K0	P1	w	Pin1
GLF82321	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