

DESCRIPTION

The GLF71321 is an ultra-efficiency, 4 A rated, integrated load switch with integrated slew rate control.

The GLF71321 features an ultra-efficient I_{QSmart}^{TM} technology that supports the lowest R_{ON} , quiescent current (I_Q) and shutdown current (I_{SD}) in the industry. Low R_{ON} reduces conduction losses, while low I_Q and I_{SD} solutions help designers to reduce parasitic leakage current, improve system efficiency, and increase battery lifetime.

The GLF71321 integrated slew rate control greatly enhances 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.

GLF71321 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.

GLF71321 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.

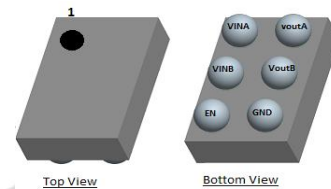
FEATURES

- Low R_{ON} : 15 m Ω Typ @ 5.5 V_{IN}
- Ultra-Low I_Q : 3 nA Typ @ 5.5 V_{IN}
- Ultra-Low I_{SD} : 50 nA Typ @ 5.5 V_{IN}
- I_{OUT} Max: 4 A
- Wide Input Range: 1.1 V to 5.5 V
6 Vabs max
- Controlled Rise Time: 400 μ s at 3.3 V_{IN}
- Internal EN Pull-Down
- Integrated Output Discharge Switch
- Wide Operating Temperature Range:
-40 $^{\circ}$ C ~ 85 $^{\circ}$ C
- HBM: 6 kV, CDM: 2 kV
- Ultra-Small: 0.97 mm x 1.47 mm WLCSP

APPLICATIONS

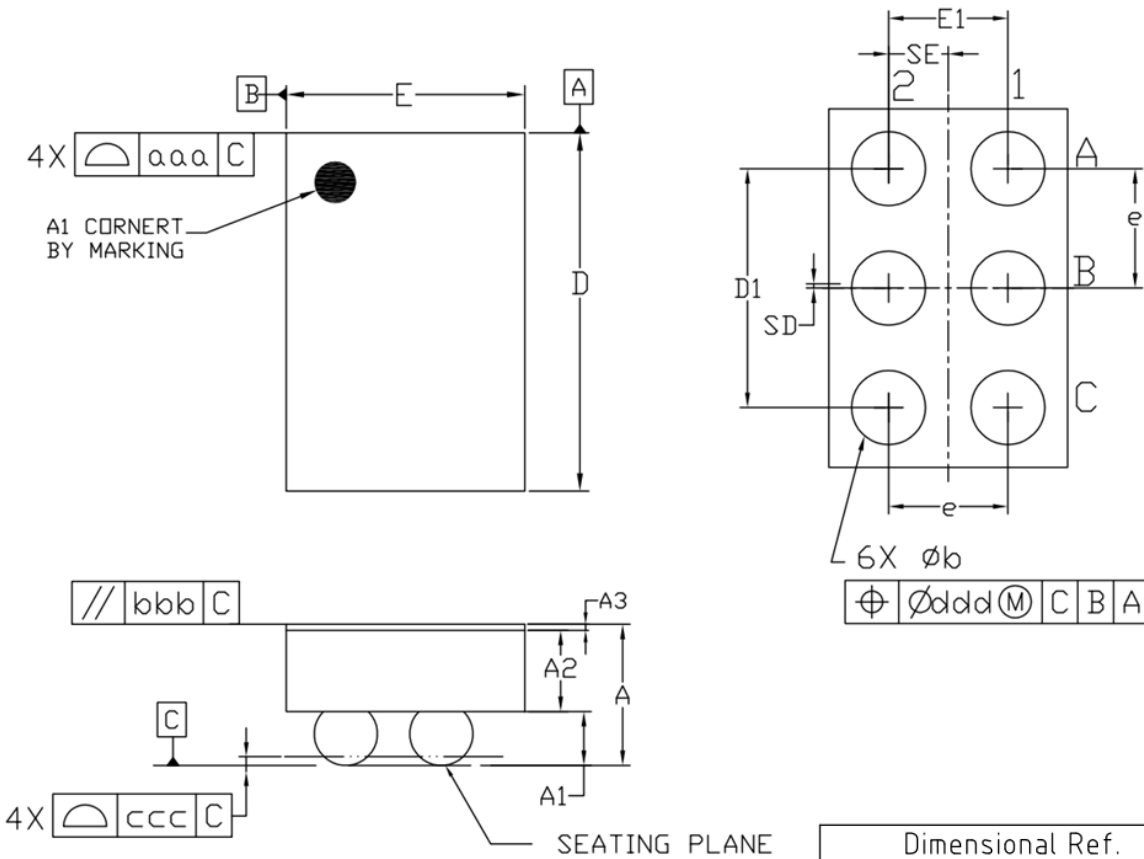
- Mobile Devices
- Data Storage, SSD
- Wearables
- Low Power Subsystems

PACKAGE



0.97 mm x 1.47 mm x 0.55 mm
0.5 mm pitch WLCSP

PACKAGE OUTLINE



ER

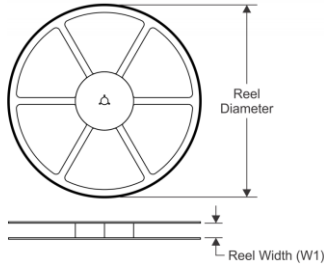
Dimensional Ref.			
REF.	Min.	Nom.	Max.
A	0.500	0.550	0.600
A1	0.225	0.250	0.275
A2	0.250	0.275	0.300
A3	0.020	0.025	0.030
D	1.460	1.470	1.485
E	0.960	0.970	0.985
D1	0.950	1.000	1.050
E1	0.450	0.500	0.550
b	0.260	0.310	0.360
e	0.500 BSC		
SD	0.000 BSC		
SE	0.250 BSC		
Tol. of Form&Position			
aaa	0.10		
bbb	0.10		
ccc	0.05		
ddd	0.05		

Notes

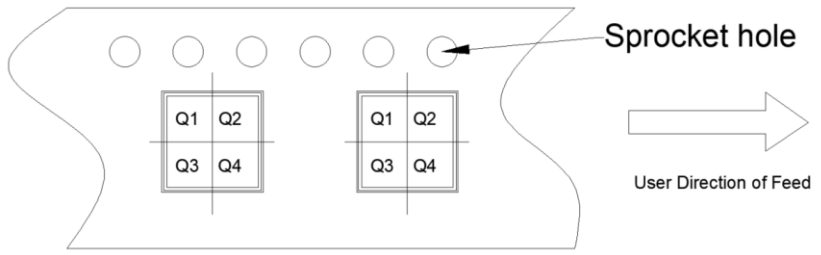
1. ALL DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGRESS)
2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.
3. A3: BACKSIDE LAMINATION

TAPE AND REEL INFORMATION

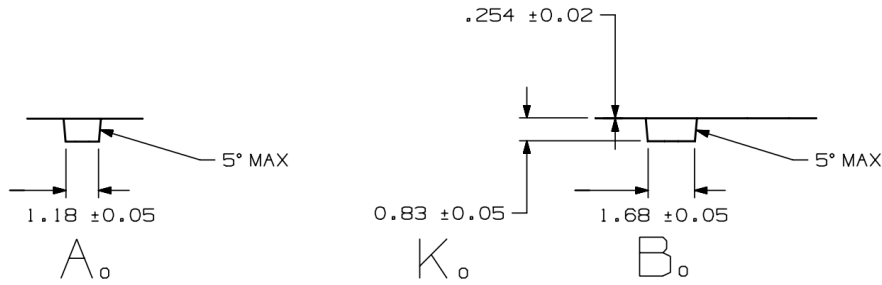
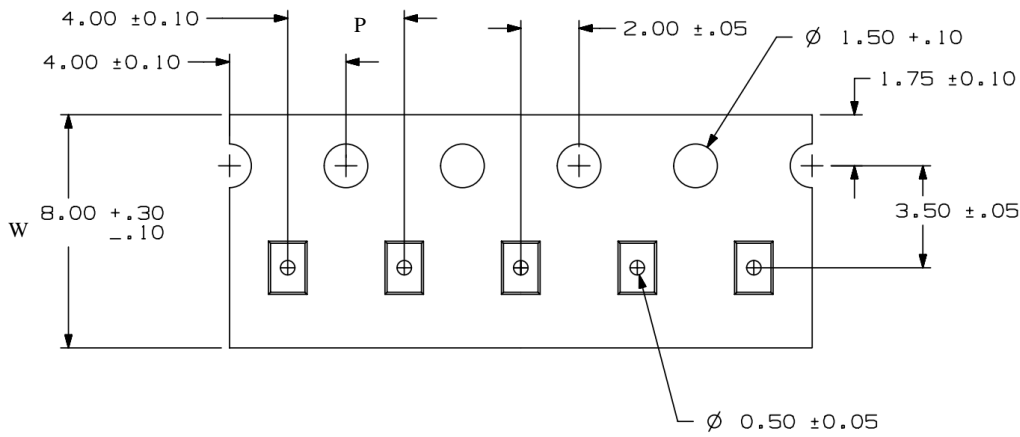
REEL DIMENSIONS



QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE



TAPE DIMENSIONS



Device	Package	Pins	SPQ	Reel Diameter(mm)	Reel Width W1	A0	B0	K0	P	W	Pin1
GLF71321	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