

GLF72110, GLF72111, GLF72112

3 A, Ultra-low Power I_QSmart™ Load Switch with True Reverse Current Blocking

Product Specification

DESCRIPTION

The GLF72110 / GLF72111 / GLF72112 is an advanced technology fully integrated I_QSmart™ load switch device with True Reverse Current Blocking (TRCB) technology and slew rate control of the output voltage.

The GLF72110 / GLF72111 / GLF72112 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 V_{OUT} pin voltage exceeds the V_{IN} voltage.

The GLF72110 / GLF72111 / GLF72112 has industry leading efficiency. It features a R_{ON} as low as 29 mΩ typical at 5.5 V, reducing power loss during conduction. The device also features ultra-low shutdown current (I_{SD}) to reduce power loss and battery drain in the off state. When EN is pulled low, and the output is grounded, the GLF72110 / GLF72111 / GLF72112 can achieve an I_{SD} as low as 24 nA typical at 5.5 V.

The GLF72110 / GLF72111 / GLF72112 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 GLF72110 / GLF72111 / GLF72112 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 pitch.

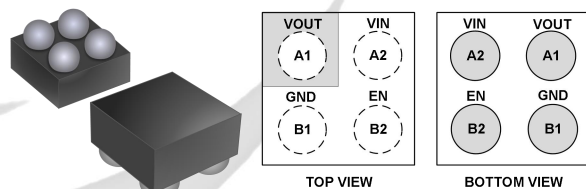
FEATURES

- True Reverse Current Blocking
- Ultra-Low I_Q: 1.4 μA Typ @ 5.5 V_{IN}
- Ultra-Low I_{SD}: 24 nA Typ @ 5.5 V_{IN}
- Low R_{ON}: 29 mΩ Typ @ 5.5V_{IN}
- I_{OUT} Max: 3 A
- Wide Input Range: 1.5 V to 5.5 V
6 V_{ABS} max
- Controlled Rise Time
- Internal EN Pull-Down Resistor, R_{EN}
- Integrated Output Discharge Switch:
GLF72111
- 0.97 mm x 0.97 mm x 0.55 mm Wafer Level
Chip Scale Package

APPLICATIONS

- Mobile Devices
- Wearables
- Low Power Subsystems

PACKAGE

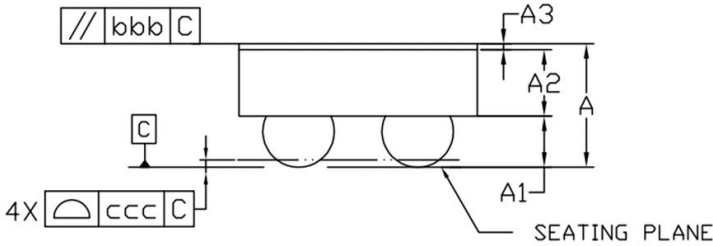
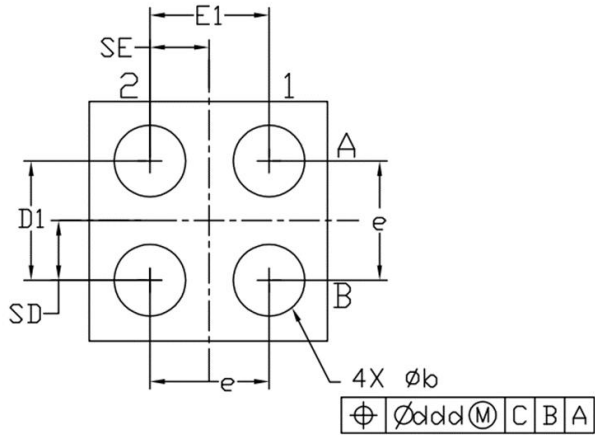
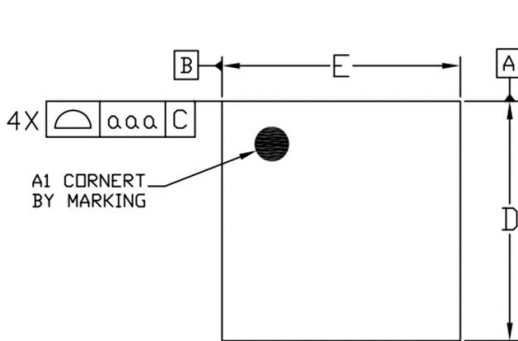


0.97 mm x 0.97 mm x 0.55 mm WLCSP

ALTERNATE DEVICE OPTIONS

Part Number	Top Mark	R _{ON} (Typ) at 5.5 V	Rise Time t _R (μs) at 3.3 V	Output Discharge	EN Activity
GLF72110	DC	29 mΩ	1200	NA	High
GLF72111	BJ		1200	85 Ω	
GLF72112	KC		18	NA	

PACKAGE OUTLINE



Dimensional Ref.

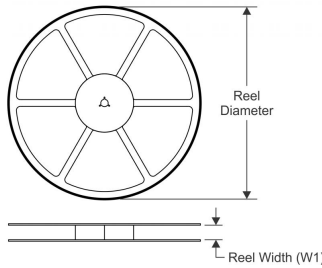
REF.	Min.	Nom.	Max.
A	0.500	0.550	0.600
A1	0.225	0.250	0.275
A2	0.255	0.275	0.300
A3	0.020	0.025	0.030
D	0.960	0.970	0.985
E	0.960	0.970	0.985
D1	0.450	0.500	0.550
E1	0.450	0.500	0.550
b	0.260	0.310	0.360
e	0.500 BSC		
SD	0.250 BSC		
SE	0.250 BSC		
Tol. of Form&Position			
aaa	0.10		
bbb	0.10		
ccc	0.05		
ddd	0.05		

Notes

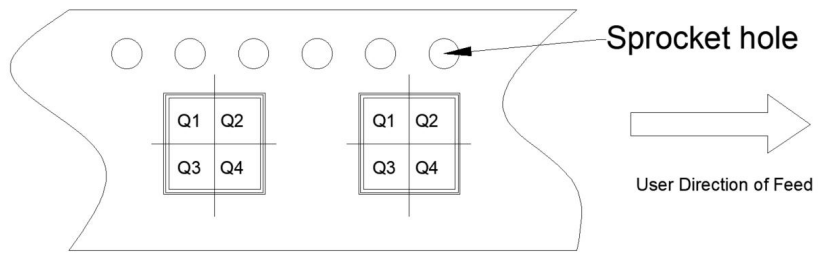
1. ALL DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGRESS)
2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.
3. A3: BACKSIDE LAMINATION

TAPE AND REEL INFORMATION

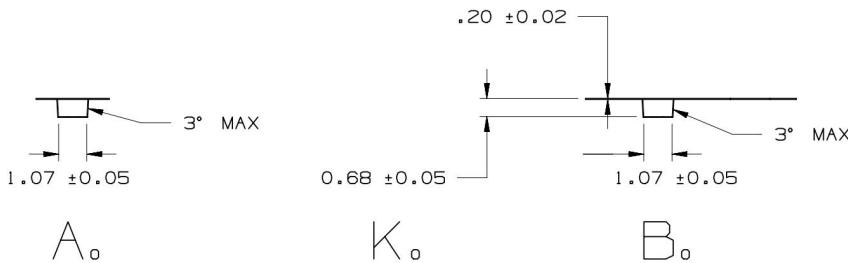
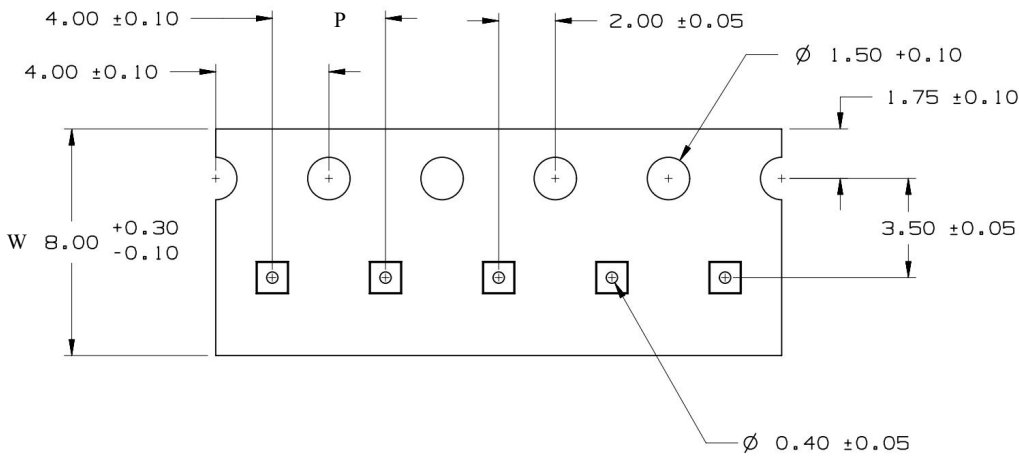
REEL DIMENSIONS



QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE



TAPE DIMENSIONS



Device	Package	Pins	SPQ	Reel Diameter(mm)	Reel Width W1	A0	B0	K0	P	W	Pin1
GLF72110	WLCSP	4	3000	180	9	1.07	1.07	0.68	4	8	Q1
GLF72111	WLCSP	4	3000	180	9	1.07	1.07	0.68	4	8	Q1
GLF72112	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