GLF72501

2 A Ultra Low Current Consumption N-channel Load Switch with Lower Input Voltage Range and Reverse Current Blocking

Product Brief

DESCRIPTION

The GLF72501 Load Switch is a fully integrated 2 A NMOS load switch with I_QSmart™ advanced technology. The device is targeted for the mobile computing and data storage markets as a high performance, low cost solution for load switch applications.

The GLF72501 has a constant low on-resistance of 32 mΩ at room temperature. The fixed rise time helps prevent undesirable inrush current when turned on and the internal EN pin pulldown resistor ensures the device remains in the shutdown mode when disabled.

The GLF72501 is available in a wafer level chip scale package (WLCSP) measuring 0.77 mm x 0.77 mm x 0.46 mm with a 0.5 mm pitch. This allows the user to save board space and increase cost savings.

The GLF72501 features a reverse current blocking protection. When the GLF72501 is disabled, it prevents reverse current flowing from the output to the input source.

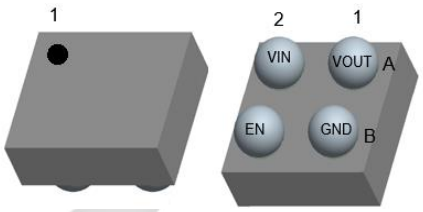
FEATURES

- Supply Voltage Range : 0.8 V to 3.6 V
- Low R_{ON} : 32 mΩ Typ at Supply Voltage Range
- I_{OUT} Max : 2 A
- Ultra-Low I_Q :
  - 200 nA Typ at 0.8 V_{IN}
  - 180 nA Typ at 1.0 V_{IN}
  - 170 nA Typ at 1.2 V_{IN}
- Integrated Slew Rate Control Driver
- Reverse Current Blocking Protection When Disabled
- Internal EN Pull-Down Resistor
- Integrated Output Discharge Switch
- HBM : 6 kV, CDM : 2 kV

APPLICATIONS

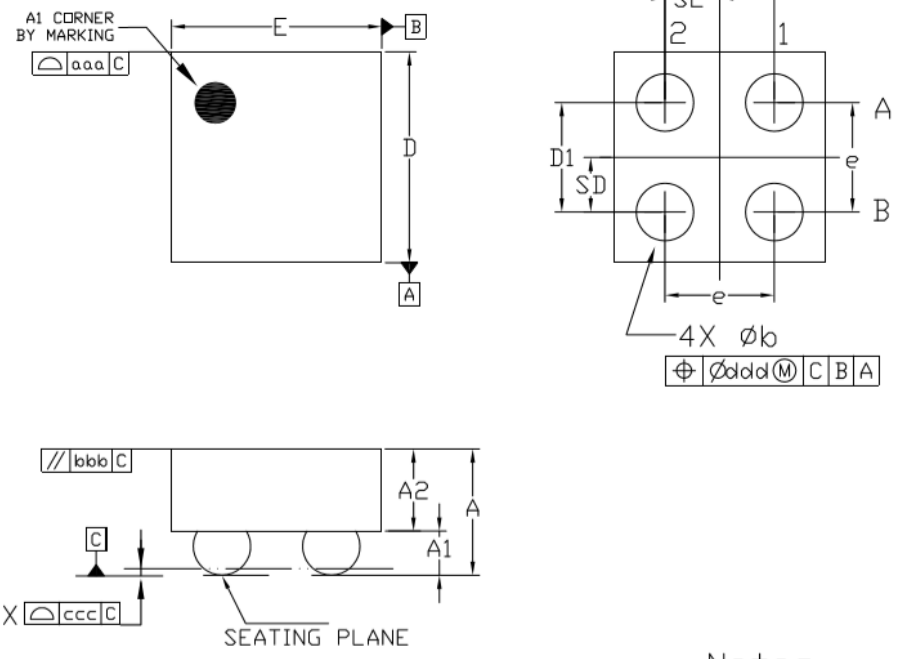
- Wearables
- Data Storage, SSD
- Low Power Subsystems

PACKAGE



0.77 mm x 0.77 mm x 0.46 mm WLCSP

PACKAGE OUTLINE



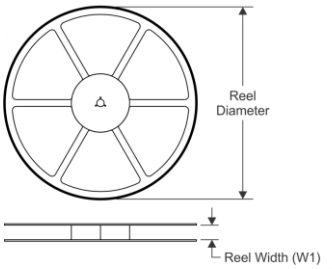
Dimensional Ref.			
REF.	Min.	Nom.	Max.
A	0.410	0.460	0.510
A1	0.135	0.160	0.185
A2	0.275	0.300	0.325
D	0.755	0.770	0.785
E	0.755	0.770	0.785
D1	0.350	0.400	0.450
E1	0.350	0.400	0.450
b	0.170	0.210	0.250
e	0.400 BSC		
SD	0.200 BSC		
SE	0.200 BSC		
Tol. of Form&Position			
aaa	0.10		
bbb	0.10		
ccc	0.05		
ddd	0.05		

Notes

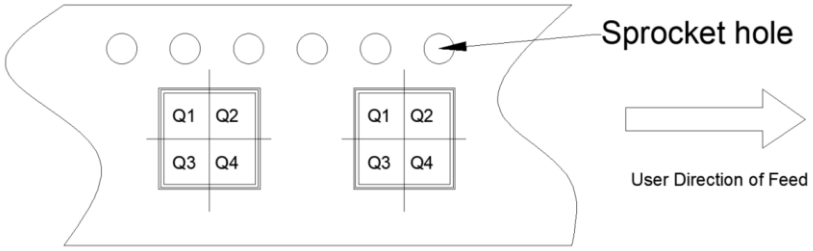
1. All DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES).
2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.

TAPE AND REEL INFORMATION

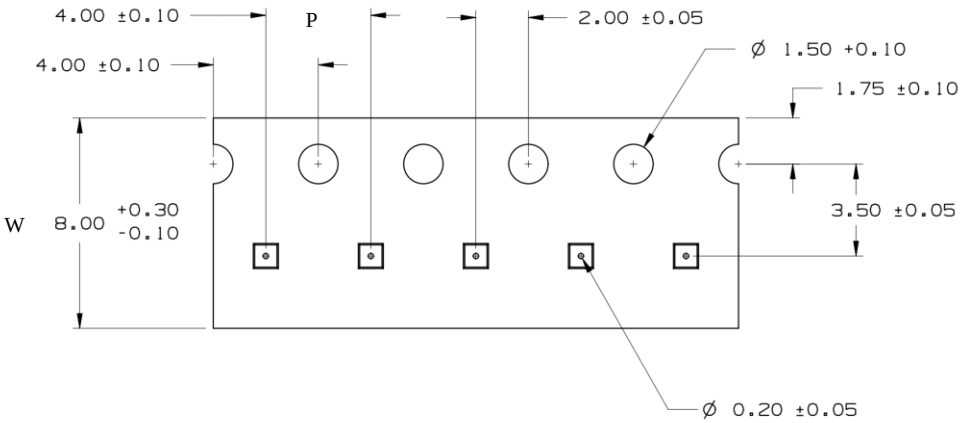
REEL DIMENSIONS

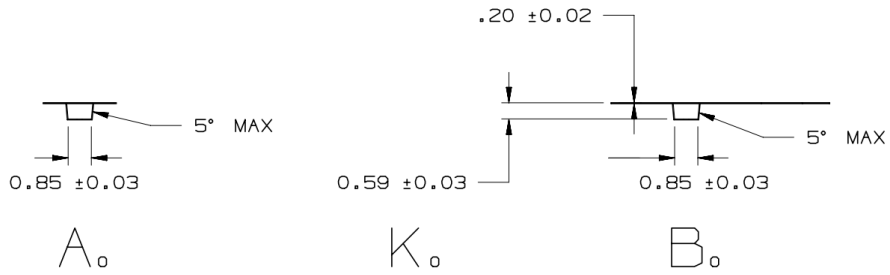


QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE



TAPE DIMENSIONS





Device	Package	Pins	SPQ	Reel Diameter(mm)	Reel Width W1	A0	B0	K0	P	W	Pin1
GLF72501	WLCSP	4	4000	180	9	0.85	0.85	0.59	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