GLF72525



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

Product Specification

DESCRIPTION

The GLF72525 Load Switch is a fully integrated 4 A NMOS power load switch with I_OSmart[™] advanced technology. The device is targeted for the mobile computing and data storage markets as a high performance solution for load switch applications.

The GLF72525 has a constant low on-resistance of 9.0 m Ω at the full input voltage range. 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. In shutdown mode the GLF72525 draws only 14 nA typical at 3.6 V input supply voltage.

The GLF72525 features a reverse current blocking protection, when GLF72525 is disabled. This function can prevents reverse current flowing from the output to the input source.

The GLF72525 is available in a wafer level chip scale package (WLCSP) measuring 0.97 mm x 1.47 mm x 0.55 mm with a 0.5 mm pitch. This allows the user to save board space and increase cost savings.

FEATURES

• Supply Voltage Range: 0.7 V to 3.6 V

• Low R_{ON}: 9.0 mΩ Typ

Iout Max: 4 A

Ultra-Low I₀:

 \circ 5.6 μ A Typ at 0.7 V_{IN}

 \circ 3.8 μ A Typ at 0.8 V_{IN}

8.8 μA Typ at 3.6 V_{IN}

Ultra-Low I_{SD}: 14 nA Typ @ 3.6 V_{IN}

Controlled V_{OUT} Turn-on Time

111 µs at 0.7 V_{IN}

113 µs at 0.8 V_{IN}

87 µs at 3.6 V_{IN}

Internal EN Pull-Down Resistor

Integrated Output Discharge Switch

Reverse Current Blocking Protection When Disabled

Operating Temperature Range: - 40 °C to 105 °C

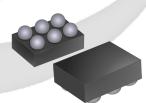
• HBM: 8 kV, CDM: 2 kV

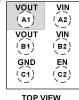
• 0.97 mm x 1.47 mm x 0.55 mm, 6 Bumps Wafer Level Chip Scale Package

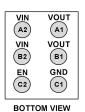
APPLICATIONS

- · Data Storage, SSD
- Wearables
- Low Power Subsystems

PACKAGE







TOP VIEW

0.97 mm x 1.47 mm x 0.55 mm, 0.5 mm Pitch

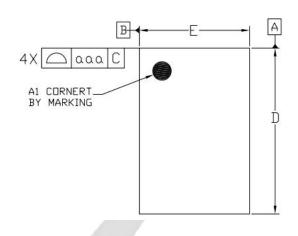
DEVICE ORDERING INFORMATION

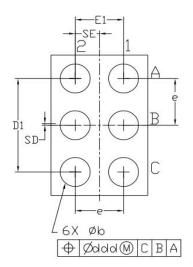
Part Number	Top Mark	R _{on} Typ. at Vin Range	Output Discharge	EN Activity		
GLF72525	FJ	9.0 mΩ	85 Ω	High		

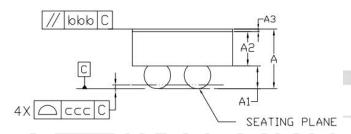


Ultra-Low Current Consumption N-channel Power Load Switch INTEGRATED POWER with Low Input Voltage Range and Reverse Current Blocking

PACKAGE OUTLINE





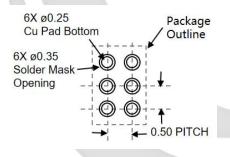


Dimensional Ref.								
REF.	Min.	Nom.	Max. 0.600					
Α	0.500	0.550						
Α1	0.225	0.250	0.275					
A2	0.250	0.275						
Α3	0.020	0.025	0.030 1.485 0.985 1.050 0.550 0.360					
D	1.460	1.470						
Ε	0.960	0.970						
D1	0.950	1.000						
E1	0.450	0.500						
Ь	0.260	0.310						
е	0.500 BSC							
SD	0.000 BSC							
SE	0.250 BSC							
To	Tol. of Form&Position							
aaa								
ььь								
ccc 0.05								

0.05

ddd

Recommended Footprint



Notes

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

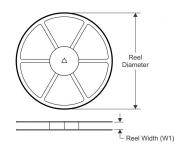


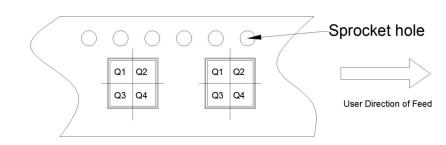
Ultra-Low Current Consumption N-channel Power Load Switch INTEGRATED POWER with Low Input Voltage Range and Reverse Current Blocking

TAPE AND REEL INFORMATION

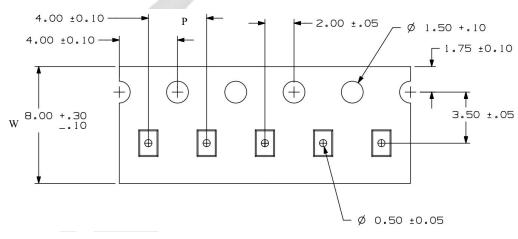
REEL DIMENSIONS

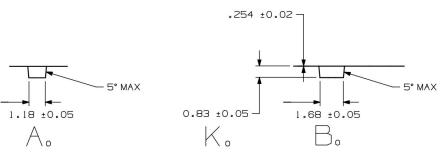
QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE





TAPE DIMENSIONS





Device	Package	Pins	SPQ	Reel Diameter (mm)	Reel Width W1	A 0	В0	K0	Р	w	Pin1
GLF72525	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