

DESCRIPTION

The GLF1501 load Switch is a fully integrated 3 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 GLF1501 has a constant low on-resistance of 52 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. In shutdown mode the GLF1501 draws only 6 nA typical at 3.6 V input supply voltage.

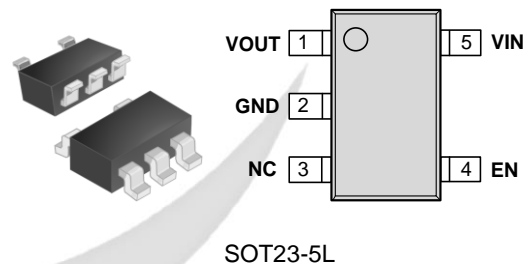
FEATURES

- Supply Voltage Range: 0.85 V to 3.6 V
- Low R_{ON}: 52 mΩ Typ at Supply Voltage Range
- I_{OUT} Max: 3 A
- Ultra-Low I_Q :
 - 50 nA Typ at 0.8 V_{IN}
 - 52 nA Typ at 1.0 V_{IN}
 - 70 nA Typ at 1.2 V_{IN}
- Integrated Slew Rate Control Driver
- Internal EN Pull-Down Resistor
- Integrated Output Discharge Switch
- HBM: 4 kV, CDM : 2 kV

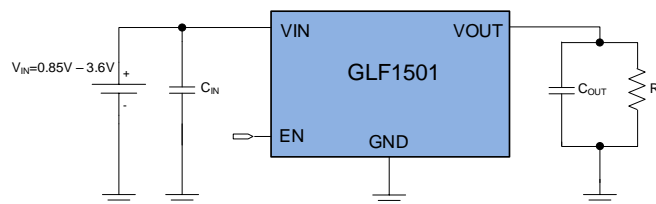
APPLICATIONS

- Low Power Subsystems
- Wearables
- Data Storage

PACKAGE



APPLICATION DIAGRAM



FUNCTIONAL BLOCK DIAGRAM

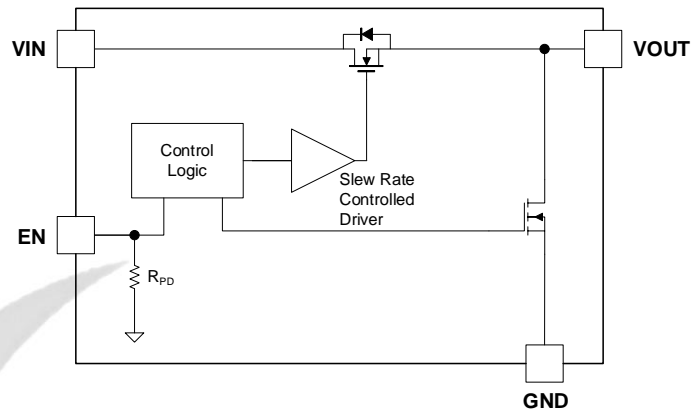


Figure 1. Functional Block Diagram

PIN CONFIGURATION

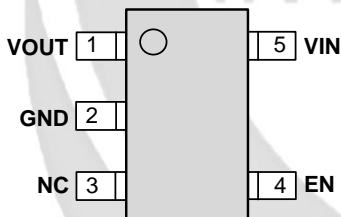
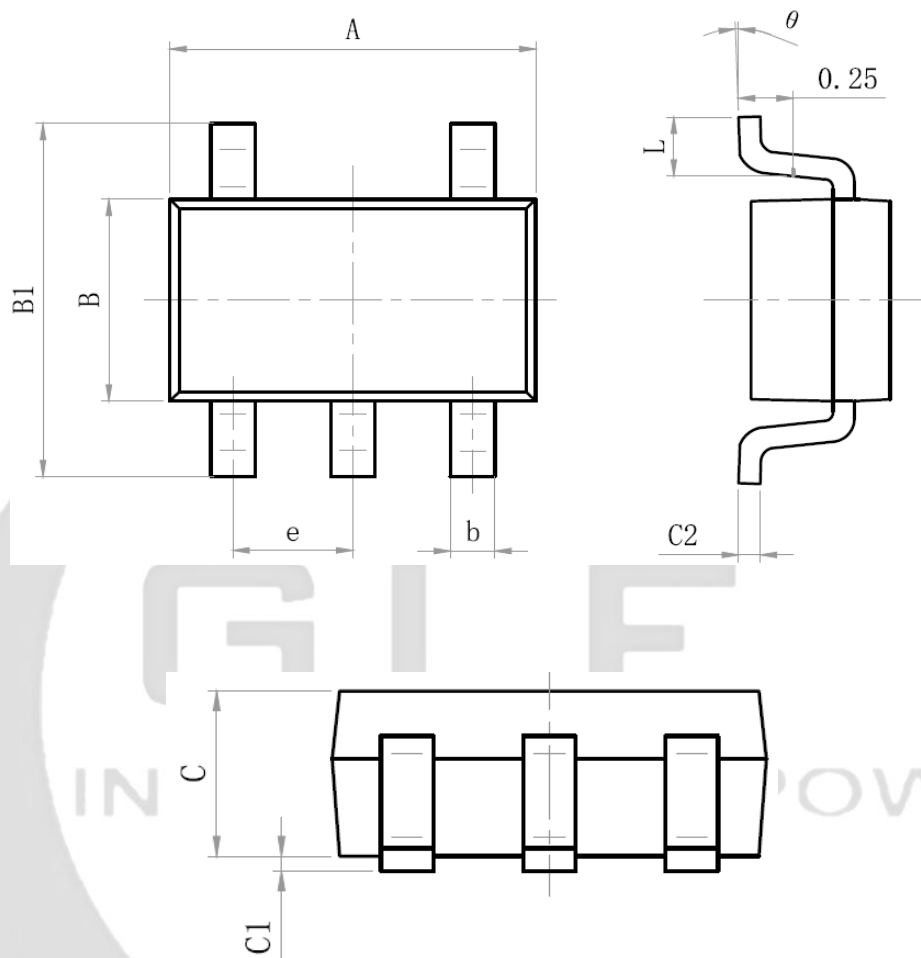


Figure 2. SOT23-5L

PIN DEFINITION

Pin #	Name	Description
1	V _{OUT}	Switch Output
2	GND	Ground
3	NC	No connection
4	EN	Enable to control the switch
5	V _{IN}	Switch Input. Supply Voltage for IC

PACKAGE OUTLINE



Size Mark	Min (mm)	Max (mm)	Size Mark	Min (mm)	Max (mm)
A	2.82	3.02	C	1.05	1.15
e	0.95 (BSC)		C1	0.03	0.15
b	0.28	0.45	C2	0.12	0.23
B	1.50	1.70	L	0.35	0.55
B1	2.60	3.00	θ	0°	8°