

DESCRIPTION

The GLF1201Q is an advanced technology fully integrated I_QSmart™ load switch device with True Reverse Current Blocking (TRCB) technology and the slew rate control of the output voltage. The best in class efficiency makes it an ideal choice for electronics requiring operation under the high temperature up to 125 °C.

The GLF1201Q offers an industry leading True Reverse Current Blocking (TRCB) performance, featuring an ultra-low threshold voltage. It minimizes reverse current flow in an event that the V_{OUT} pin voltage exceeds the V_{IN} voltage.

An integrated slew rate control can also enhance 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 currents during turn-on to minimize voltage droop.

The GLF1201Q 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.

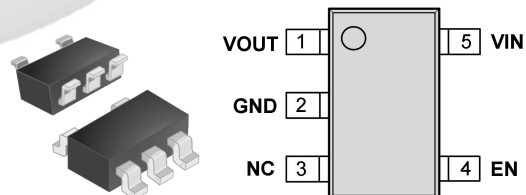
FEATURES

- AEC-Q100 Qualified
- Qualified for Automotive Applications:
 - Temperature Grade 1: Ambient Operating
 - Temperature Range: - 40 °C ~ +125 °C
- Wide Input Range: 1.5 V to 5.5 V
6 V abs max
- True Reverse Current Blocking
- R_{ON}: 60 mΩ Typ at 5.5 V_{IN}
- I_{OUT} Max: 2 A
- Ultra-Low I_Q: 0.48 μA Typ at 5.5 V_{IN}
- Ultra-Low I_{SD}: 25 nA Typ at 5.5 V_{IN}
- Controlled Rise Time: 600 μs at 3.3V_{IN}
- Internal EN Pull-Down Resistor on
- Integrated Output Discharge Switch
- ESD Performance Tested per AEC Q100
HBM: 4 kV, CDM: 2 kV
- Moisture Sensitivity Level: MSL-3 and 260 °C Peak Reflow Temp
- Lead-free, Halogen-free, and Adhere to RoHS Directive

APPLICATIONS

- Automotive Electronics
- Infotainment Systems
- Diagnosis System

PACKAGE



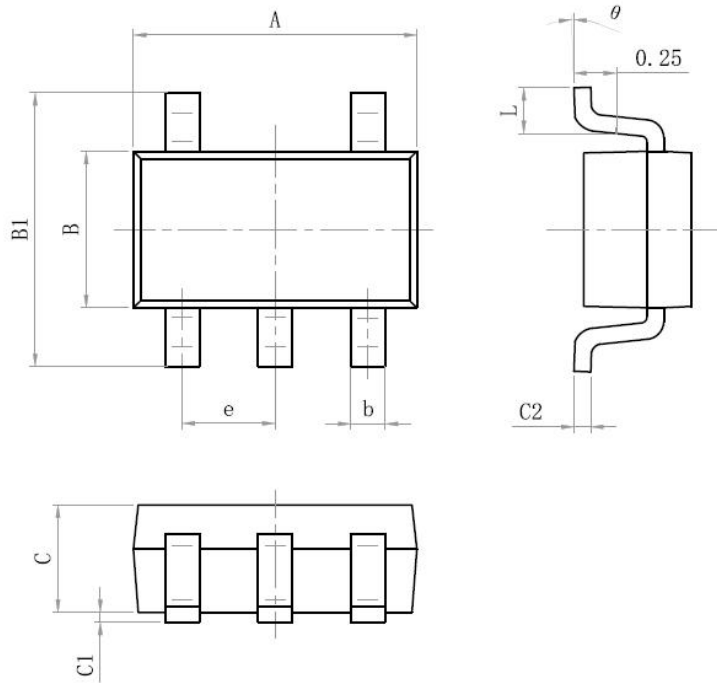
SOT23-5L

ALTERNATE DEVICE OPTIONS

Part Number	Top Mark	R _{ON} (Typ) at 5.5 V _{IN}	TRCB	Output Discharge	EN Activity
GLF1201Q-T1G7	DN	60 mΩ	Yes	85 Ω	High

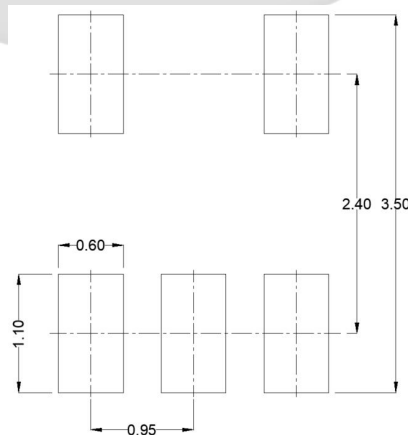
PACKAGE OUTLINE

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°



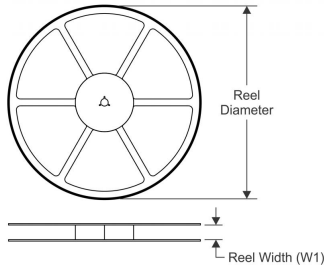
WER

Recommended Footprint

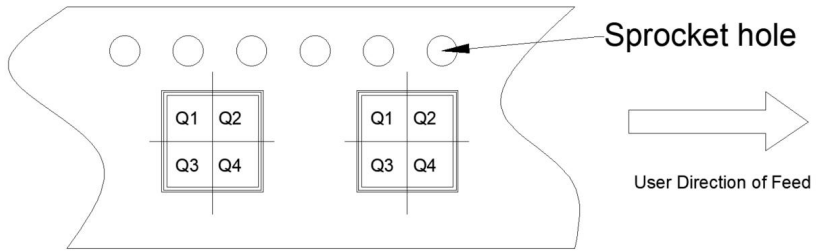


TAPE AND REEL INFORMATION

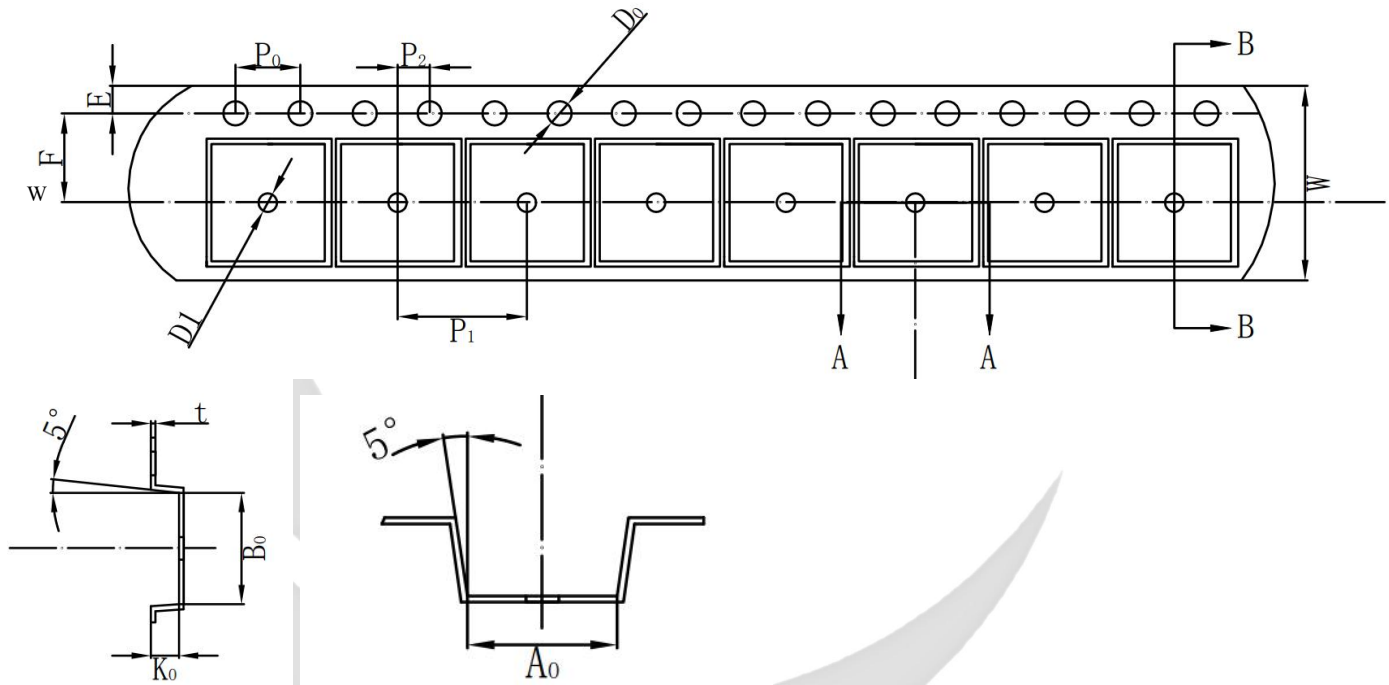
REEL DIMENSIONS



QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE



TAPE DIMENSIONS



Device	Package	Pins	SPQ	Reel Diameter (mm)	Reel Width W1	A0	B0	K0	P1	W	Pin1
GLF1201Q-T1G7	SOT23-5	5	3000	178	9	3.25	3.30	1.38	4	8	Q3

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

P1: Pitch between successive cavity centers