

DESCRIPTION

The GLF1111Q is an ultra-efficiency, 2 A rated, Load Switch with integrated slew rate control. The best in class efficiency makes it an ideal choice for electronics requiring operation under the high temperature up to 125 °C.

The GLF1111Q features ultra-efficient I_QSmart™ technology that supports the lowest quiescent current (I_Q) and shutdown current (I_{SD}) in the industry. Low I_Q and I_{SD} solutions help designers to reduce parasitic leakage current, improve system efficiency, and increase battery lifetime.

The 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 GLF1111Q 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 reduce operating cost.

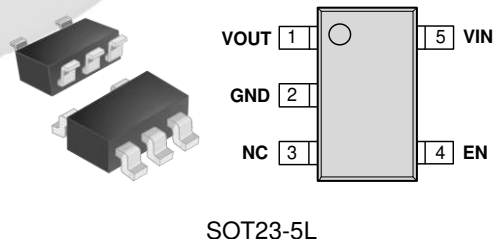
FEATURES

- 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
- R_{ON}: 60 mΩ Typ @ 5.5 V_{IN}
- I_{OUT} Max: 2 A
- Ultra-Low I_Q: 2 nA Typ @ 5.5 V_{IN}
- Ultra-Low I_{SD}: 13 nA Typ @ 5.5 V_{IN}
- Controlled Rise Time: 600 μs at 3.3 V_{IN}
- Internal EN Pull-Down Resistor
- 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 Temperature
- Lead-free, Halogen-free, and adhere to RoHS Directive

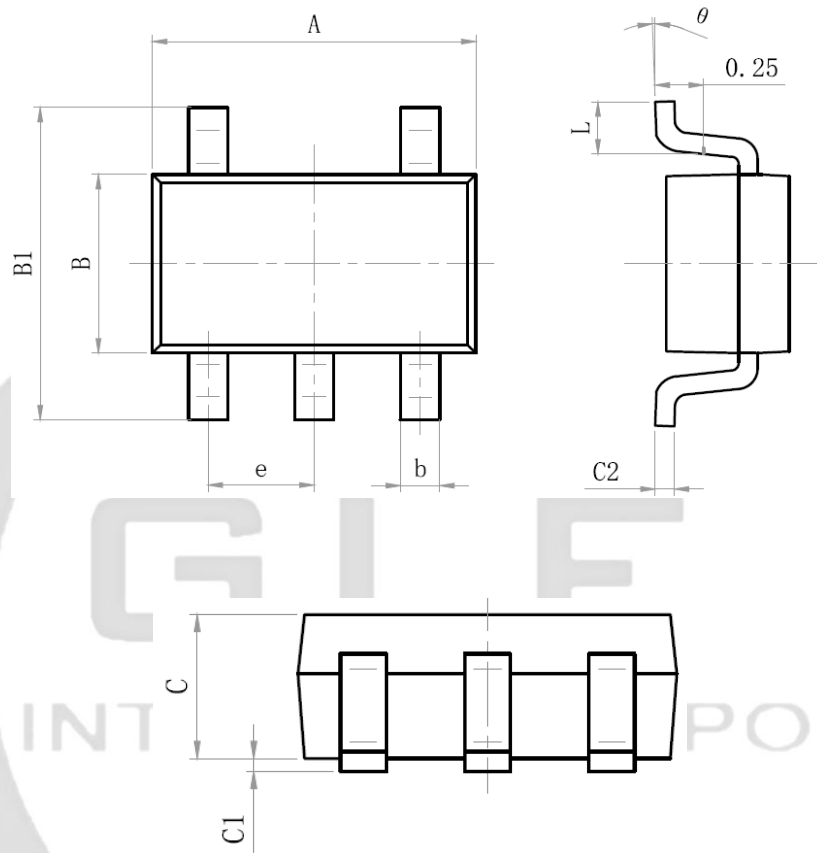
APPLICATIONS

- Automotive Electronics
- Infotainment Systems
- Diagnosis System

PACKAGE



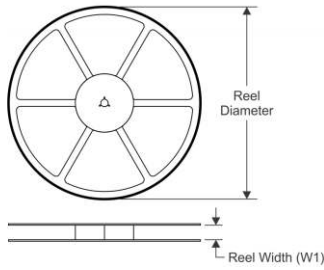
PACKAGE OUTLINE



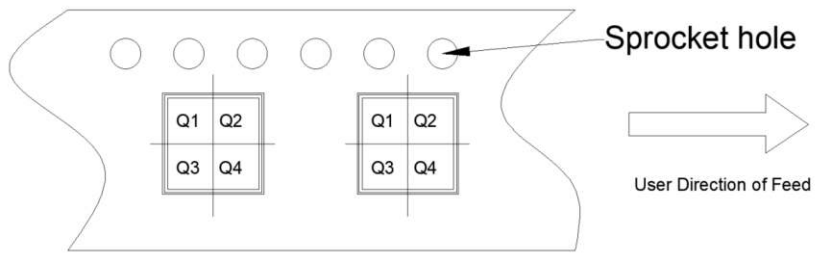
Size Mark	Min (mm)	Max (mm)	Size Mark	Min (mm)	Max (mm)
A	2.82	3.02	C	1.05	1.15
e	0.95 (BSC)		C1	0.03	0.15
b	0.28	0.45	C2	0.12	0.23
B	1.50	1.70	L	0.35	0.55
B1	2.60	3.00	θ	0°	8°

TAPE AND REEL INFORMATION

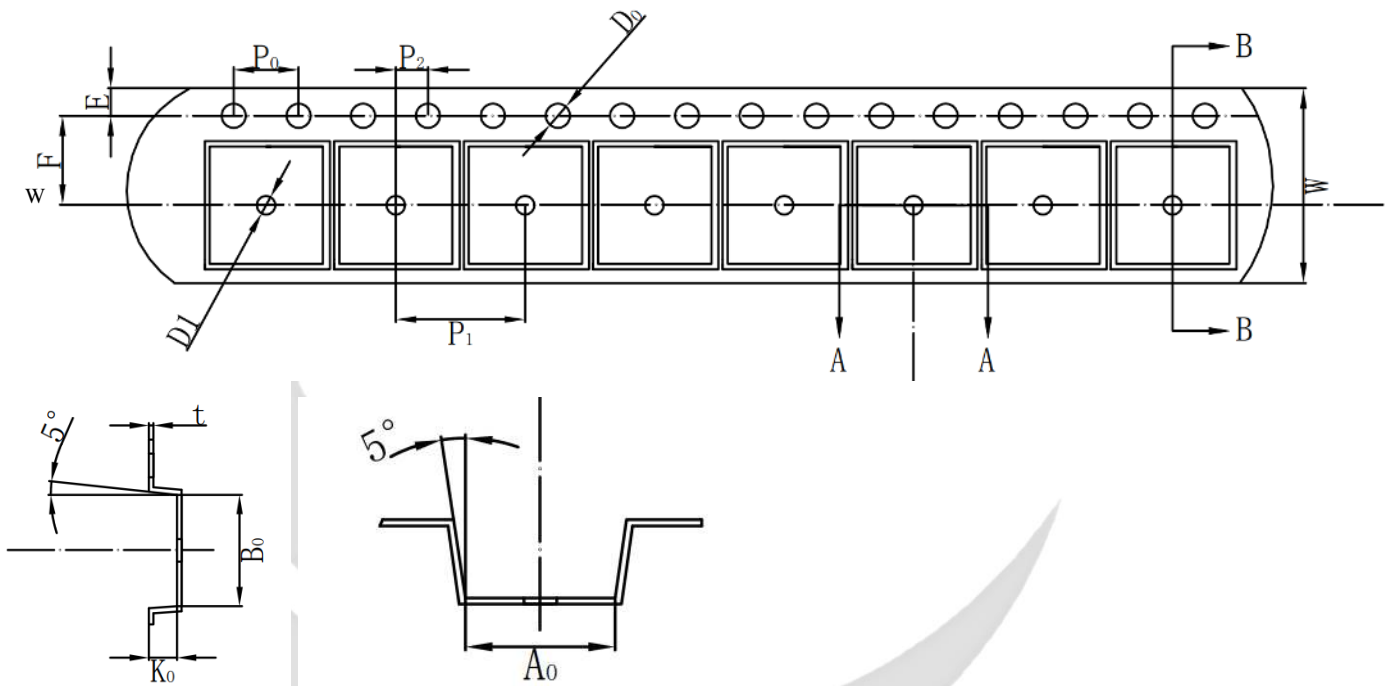
REEL DIMENSIONS



QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE



TAPE DIMENSIONS



Device	Package	Pins	SPQ	Reel Diameter(mm)	Reel Width W1	A0	B0	K0	P1	W	Pin1
GLF1110Q-T1G7	SOT23-5	5	3000	178	9	3.25	3.30	1.38	4	8	Q3
GLF1111Q-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