

DESCRIPTION

The GLF1110Q / 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 GLF1110Q / 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 GLF1110Q / GLF1111Q supports an industry leading wide input voltage range and helps to improve operating life and system robustness.

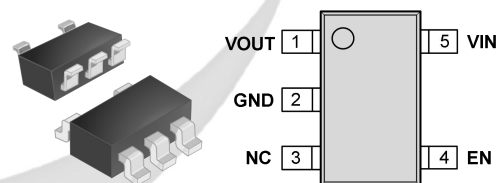
APPLICATIONS

- Automotive Electronics
- Automotive Infotainment Systems
- Automotive Diagnosis System

FEATURES

- AEC-Q100 Qualified
- Qualified for Automotive Applications:
 - Temperature Grade 1: Ambient Operating Temperature Range: -40 °C to +125 °C
- Wide Input Range: 1.5 V to 5.5 V
6 V abs max
- R_{ON}: 60 mΩ Typ at 5.5 V_{IN}
- I_{OUT} Max: 2 A
- Ultra-Low I_Q: 2 nA Typ at 5.5 V_{IN}
- Ultra-Low I_{SD}: 13 nA Typ at 5.5 V_{IN}
- Controlled Rise Time: 600 μs at 3.3 V_{IN}
- Internal EN Pull-Down Resistor
- Integrated Output Discharge Switch: GLF1111Q
- 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

PACKAGE



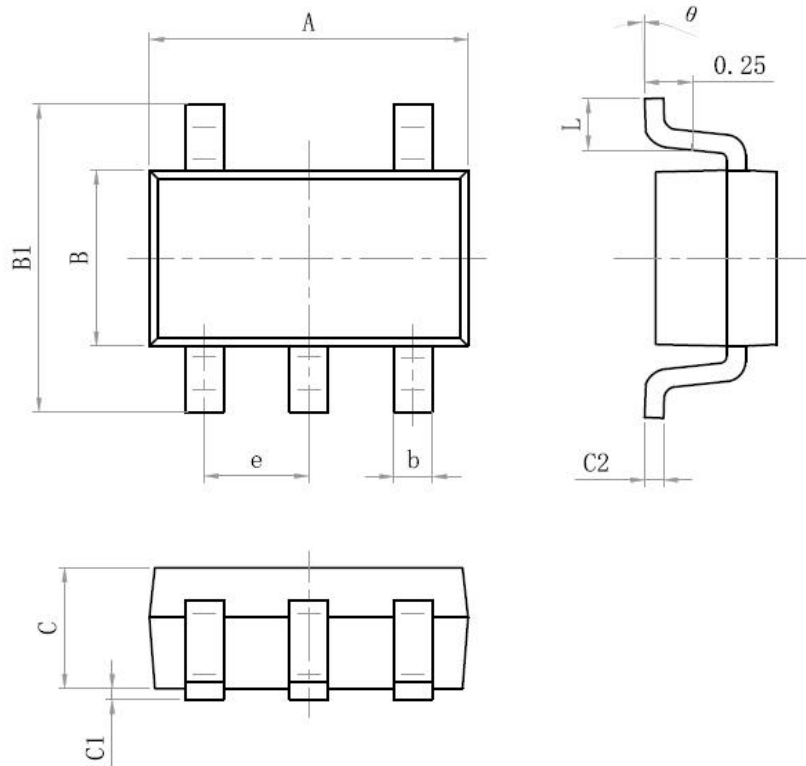
SOT23-5L

ALTERNATE DEVICE OPTIONS

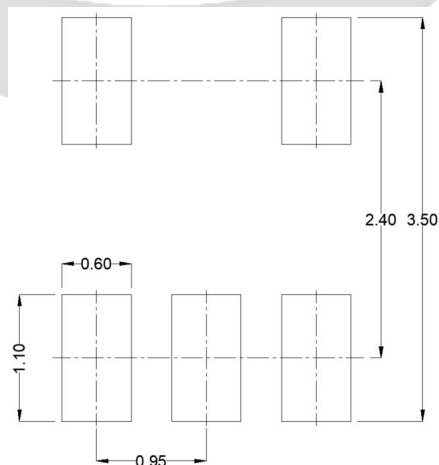
Part Number	Top Mark	R _{ON} (Typ) at 5.5 V	Output Discharge	EN Activity
GLF1110Q-T1G7	DKQ	60 mΩ	NA	High
GLF1111Q-T1G7	DLQ	60 mΩ	85 Ω	High

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°

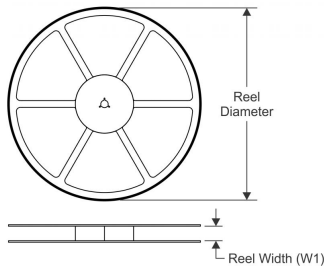


Recommended Footprint

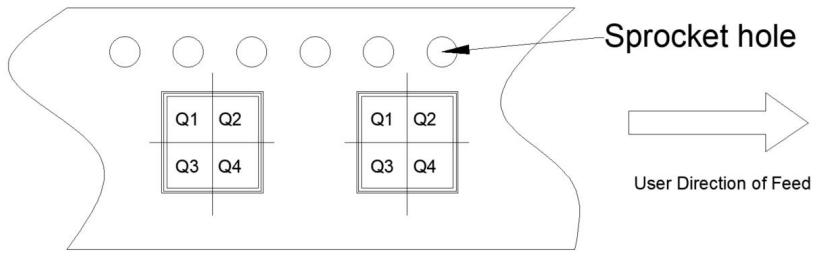


TAPE AND REEL INFORMATION

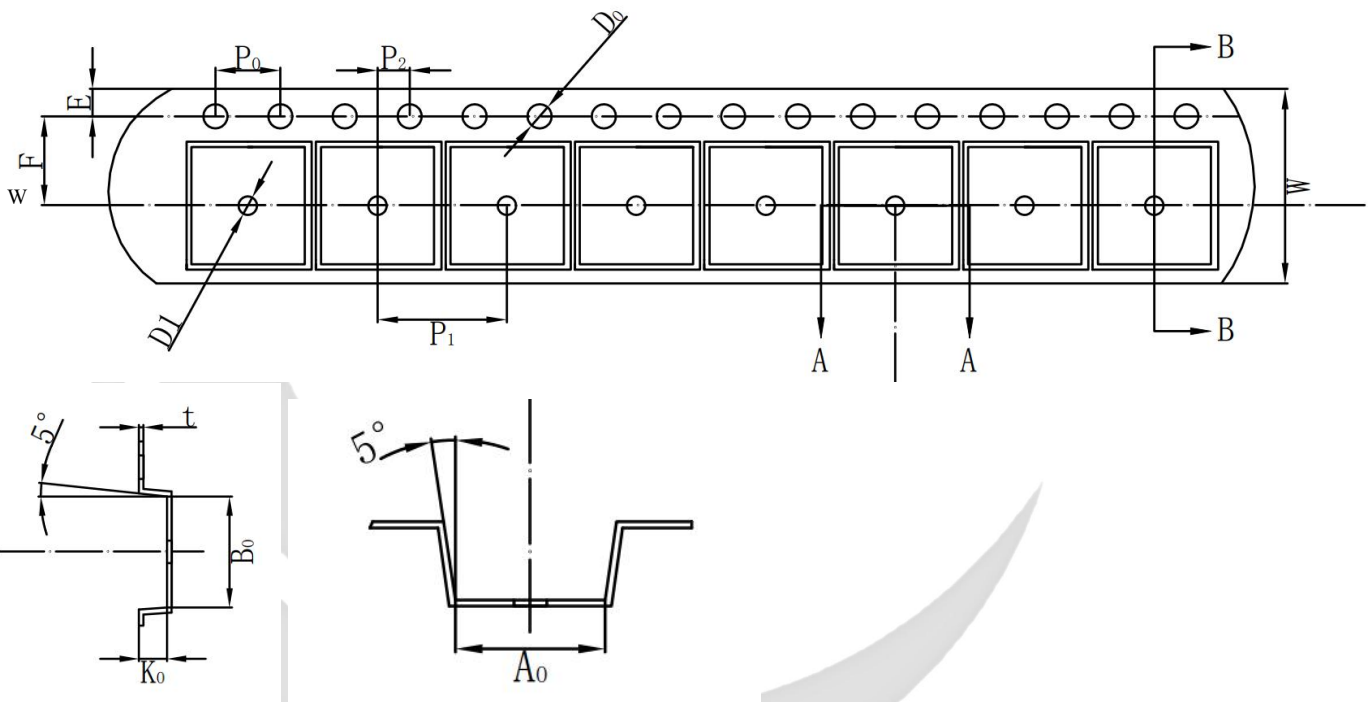
REEL DIMENSIONS



QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE



TAPE DIMENSIONS



Device	Package	Pins	SPQ	Reel Diameter (mm)	Reel Width W1	A0	B0	K0	P1	W	Pin1
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