

GLF2310, GLF2311, GLF2321 High Precision Programmable Current Limit Power Switch

DESCRIPTION

The GLF2310/ GLF2311/ GLF2321 is an advanced technology fully integrated load switch with programmable overcurrent protection. The GLF2310/GLF2311 also has various protection features such as under-voltage lockout, true reverse current blocking (TRCB), short-circuit protection and thermal shutdown.

The GLF2310/GLF2311/GLF2321 provides built-in output voltage slew rate control to limit inrush current and voltage surges. The FLGB output pin can be used to signal to the system controller that an overcurrent event has occurred. An integrated thermal shutdown (TSD) ensures full switch protection during any short circuit.

The GLF2310/GLF2311/GLF2321 support an industry-leading wide input voltage range, helping to improve lifetime and system robustness. It is the ideal switch for USB power.

FEATURES

- Input Range: 2.5 V to 5.5 V
- Programmable Input Constant Limit Current (GLF2310A, GLF2311A)
 - Range: 40 mA - 2.1 A
- Fixed Output Constant Limit Current:
 - 2.1 A (GLF2311B)
 - 1.8 A (GLF2321B)
- Low R_{ON} : 56 m Ω Typ. @ 5.0 V_{IN}
- Ultra-Low I_Q: 20 μ A Typ. @ 5.0 V_{IN}
- Ultra-Low I_{SD}: 50 nA Typ. @ 5.0 V_{IN}
- Under Voltage Lockout Protection
- Output Voltage Slew Rate Controlled
- True Reverse Current Blocking Protection
- Short Circuit Protection
- Deglitched Fault Flag Indication at Over Current
- Integrated Output Discharge Switch: GLF2311A, GLF2311B, GLF2321B
- Thermal Shutdown Protection
- SOT23 package

PRODUCT TABLE

| Part Number | Top Mark | Current Limit ILIM | Output Discharge | Fault Flag FLGB | EN Activity | Package |
|---------------|----------|---|------------------|-----------------|-------------|----------|
| GLF2310A-T1G7 | FA | Programmable Output Current Limit Up to 2.1 A | NA | NA | High | SOT23-5L |
| GLF2311A-T1G7 | FB | | 85 Ω | NA | | SOT23-5L |
| GLF2310A-T2G7 | HA | | NA | Yes | | SOT23-6L |
| GLF2311A-T2G7 | HB | | 85 Ω | Yes | | SOT23-6L |
| GLF2311B-T1G7 | GB | Fixed Output Current Limit 2.1 A | 85 Ω | Yes | | SOT23-5L |
| GLF2321B-T1G7 | KB | Fixed Output Current Limit 1.8 A | 85 Ω | Yes | | SOT23-5L |