

DESCRIPTION

The JW[®]Q7101 is a single channel current-limited power switch optimized for Universal Serial Bus (USB) and other hot-swap applications. The rise and fall times are controlled to minimize current overshoot or undershoot during switches on/off.

The device has fast short-circuited response time for improved overall system robustness. It provides a complete protection solution, such as reverse current blocking and limit, over-current protection, over-temperature protection and short-circuit protection, as well as controlled rise time and under-voltage lockout function. A 7.5ms de-glitch time on the open-drain flag output prevents false over-current reporting.

JWQ7101 offers SOT23-6 package.

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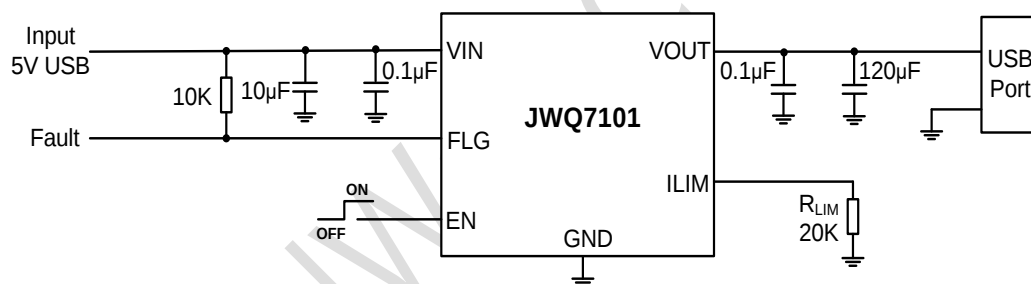
FEATURES

- AEC-Q100 qualified
- Up to 1.5A maximum load current
- $\pm 11.8\%$ accurate current limit@1.7A
- FLG: active low
- Adjustable current limit
- Reverse current blocking during shutdown and reverse current limit during enable
- Constant-current during over-current
- Fast short-circuit response time: 2 μ s (typ.)
- Adjustable current limit
- Operating range: 2.7V – 5.5V
- Over-current protection, short-circuit protection and thermal protection
- Fault report (FAULT) with de-glitch time
- ESD protection: 2kV HBM, 750V CDM
- Available in SOT23-6

APPLICATIONS

- Automotive Electronics
- Infotainment
- Cluster
- ADAS(Advanced Driver Assistance Systems)

TYPICAL APPLICATION



ORDER INFORMATION

DEVICE ¹⁾	PACKAGE	TOP MARKING ²⁾
JWQ7101SOTB#TRPBF	SOT23-6	JWFX□ YW□□□

Notes:

- 1) JW□□ # TRPBF

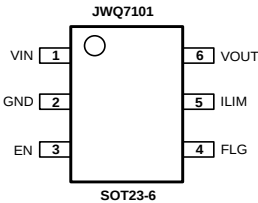
 - PB Free
 - Tape and Reel(If " TR " is not shown, it means tube)
 - Package Code
 - Part No.
- 2) Line1: JW□□□

 - Lot number
 - Product code
 - Joulwatt LOGO
- Line2: YW□□□

 - Lot number
 - Week code
 - Year code

PIN CONFIGURATION

TOP VIEW



PIN DESCRIPTION

PIN	NAME	DESCRIPTION
6	VOUT	Output voltage
2	GND	Ground(0V)
4	FLG	Active-low open-drain output, asserted during over-current, over-temperature or reverse-voltage conditions
3	EN	logic high turns on power switch.
1	VIN	Input, connect a 10 μ F or greater ceramic capacitor from VIN to GND as close to IC as possible.
5	ILIM	Use external resistor to set current-limit threshold; Recommended $12\text{k}\Omega \leq R_{\text{LIM}} \leq 30\text{k}\Omega$.

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