

Multi-Mode Primary-Side Regulation (PSR) CV/CC Controller

Parameters Subject to Change Without Notice

DESCRIPTION

JW[®]1502 is a high performance Primary Side Regulation (PSR) controller with high precision CV/CC control ideal for charger applications.

In CV mode, JW1502 adopts Multi Mode Control which uses the hybrid of AM (Amplitude Modulation) mode and (Frequency Modulation) FM mode to improve system efficiency and reliability. In CC mode, the IC uses PFM control with line and load CC compensation. The IC can achieve audio noise free operation and optimized dynamic response. The built-in Cable Drop Compensation (CDC) function can provide excellent CV performance.

JW1502 integrates functions and protections of Under Voltage Lockout (UVLO), VDD over Voltage Protection (VDD OVP), Cycle-by-cycle Current Limiting (OCP), Short Load Protection (SLP), Gate Clamping, and VDD Clamping.

FEATURES

- Multi-Mode PSR Control
- Audio Noise Free Operation for PSR
- Optimized Dynamic Response for PSR
- Low Standby Power <70mW
- $\pm 4\%$ CC and CV Regulation
- Programmable Cable Drop Compensation (CDC) in PSR CV Mode
- Built-in AC Line & Load CC Compensation
- Build in Protections:
 - Short Load Protection (SLP)
 - On-Chip Thermal Shutdown (OTP)
 - Cycle-by-Cycle Current Limiting
 - Leading Edge Blanking (LEB)
 - Pin Floating Protection
 - VDD UVLO, OVP & Clamp
- SOT23-6 package

APPLICATIONS

- Battery Chargers for Cellular Phones
- AC/DC Power Adapter

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TYPICAL APPLICATION

