

Multi-Mode Primary-Side Regulation (PSR)

Parameters Subject to Change Without Notice

DESCRIPTION

JW®1501A/JW1501B is a high performance Primary Side Regulation (PSR) power switch with high precision CV/CC control ideal for charger applications.

In CV mode, JW1501A/JW1501B 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.

JW1501A/B 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), and VDD Clamping.

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FEATURES

- Integrated with 650V MOSFET
- 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

8-Pin SOP package

APPLICATIONS

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

TYPICAL APPLICATION

