

super-QR/PSR™ CV/CC Controller with Fast Dynamic Response

FEATURES

- ◆ Proprietary *super-QR/PSR™* (Quasi-Resonant & Primary Side Regulation) Control for High Efficiency and Low EMI
- ◆ Dynamic Base Drive for High Efficiency
- ◆ Fast Dynamic Response
- ◆ Proprietary “Audio Noise Cancellation” Control
- ◆ Direct Drive of Low Cost BJT
- ◆ Proprietary “Zero-Output Startup” Control
- ◆ Proprietary “Smart Output Short Protection”
- ◆ Proprietary Cable Drop Compensation
- ◆ Less than 100mW Standby Power
- ◆ $\pm 5\%$ CC and CV Precision
- ◆ Cycle-by-Cycle Current Limiting
- ◆ On-Chip Thermal Shutdown (OTP)
- ◆ Leading Edge Blanking (LEB)
- ◆ Soft Start
- ◆ Output Over Voltage Protection
- ◆ VDD UVLO, OVP & Clamp

APPLICATIONS

- ◆ Battery chargers for cellular phones, cordless phones, PDA, digital cameras, etc
- ◆ Replaces linear transformer and RCC SMPS
- ◆ AC/DC LED lighting

GENERAL DESCRIPTION

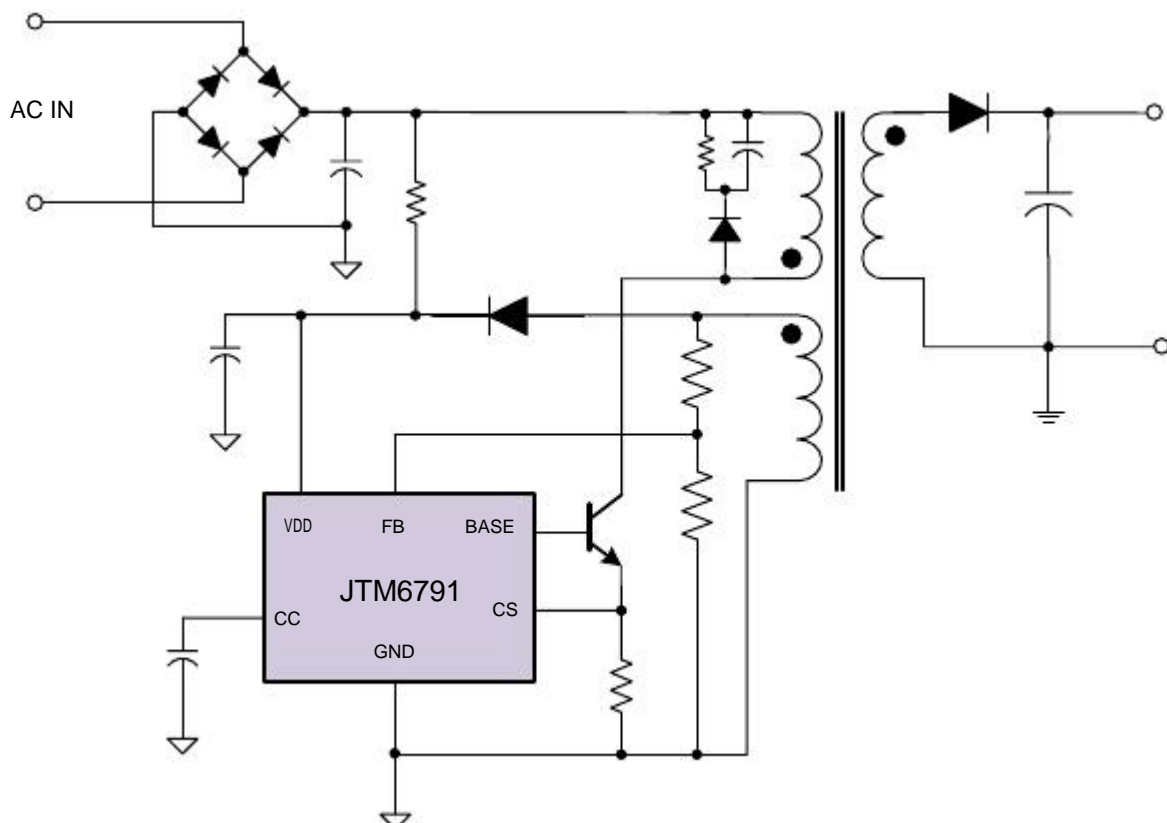
JTM6791 is a high performance, highly integrated QR (Quasi Resonant Mode) and Primary Side Regulation (PSR) controller for offline small power converter applications. The IC can achieve fast dynamic response performance.

JTM6791 has proprietary *super-QR/PSR™* control for high efficiency and low EMI. The IC integrates proprietary “Audio Noise Cancellation” control for audio noise free operation. The IC also integrates “Dynamic Base Drive” for high efficiency. JTM6791 integrates proprietary “Zero-Output Startup” control to achieve startup when output is zero voltage. The IC has proprietary “Smart Output Short Protection”, which can limit maximum power when output is short. The IC also has built-in cable drop compensation function to achieve excellent CV performance.

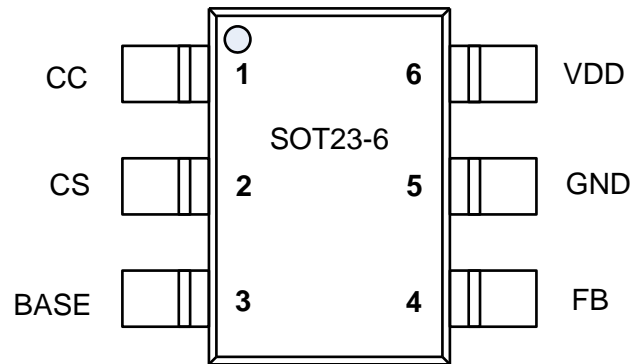
JTM6791 integrates functions and protections of FB Short Protection, Under Voltage Lockout (UVLO), VDD Over Voltage Protection (VDD OVP), Soft Start, Cycle-by-cycle Current Limiting (OCP), On-Chip Thermal Shutdown (OTP), Pin Floating Protection, VDD Clamping.

JTM6791 is available in SOT23-6 package.

TYPICAL APPLICATION



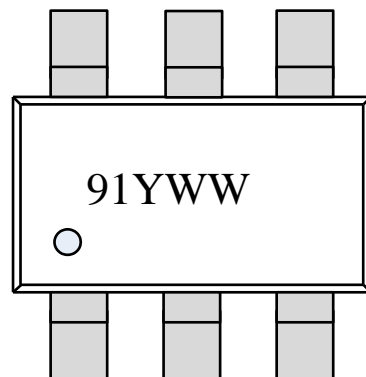
Pin Configuration



Ordering Information

Part Number	Top Mark	Package		Tape & Reel
JTM6791LGT	.91YWW	SOT23-6	Green	Yes

Marking Information



Dot: Pin1 Mark
 91:Part number JTM6791
 YWW: Year&Week Code

Pin Description

Pin Num	Pin Name	I/O	Description
1	CC	O	Connect a capacitor between this pin and GND for CC regulation.
2	CS	I	Current sense pin.
3	BASE	O	Base drive for BJT.
4	FB	I	System feedback pin. This control input regulates both the output voltage in CV mode and output current in CC mode based on the flyback voltage of the auxiliary winding.
5	GND	P	Ground
6	VDD	P	IC power supply pin.