FEATURES

◆ Easily Meet EPS Level 6
◆ Less than 75mW Standby Power
◆ Proprietary super-QR/PSR™ (Quasi-Resonant & Primary Side Regulation) Control for High Efficiency and Low EMI
◆ ±5% CC and CV Precision
◆ Proprietary Cable Drop Compensation
◆ Smart Output Short Protection
◆ Cycle-by-Cycle Current Limiting
◆ Built-in Leading Edge Blanking (LEB)
◆ Pin Floating Protection
◆ Built-in Soft Start
◆ Output Over Voltage Protection
◆ VDD OVP & Clamp
◆ VDD Under Voltage Lockout (UVLO)

APPLICATIONS

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

GENERAL DESCRIPTION

SF6761S is a high performance, highly integrated QR (Quasi Resonant Mode) and Primary Side Regulation (PSR) controller for offline small power converter applications.

SF6761S has proprietary super-QR/PSR™ control for high efficiency and low EMI. The standby power is less than 75mW @230VAC. Thus, the IC can meet EPS Level 6 energy standard easily. The IC also has built-in cable drop compensation function, which can provide excellent CV performance.

SF6761S integrates functions and protections of Under Voltage Lockout (UVLO), VDD Over Voltage Protection (VDD OVP), Soft Start, Cycle-by-cycle Current Limiting (OCP), Pin Floating Protection, Gate Clamping, VDD Clamping.

SF6761S is available in SOT23-6 package.

TYPICAL APPLICATION
Pin Configuration

Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Top Mark</th>
<th>Package</th>
<th>Tape &amp; Reel</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF6761SLGT</td>
<td>61SYW</td>
<td>SOT23-6</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Marking Information

Dot: Pin1 Mark  
61S:Part number SF6761S  
YW: Year&Week Code

Pin Description

<table>
<thead>
<tr>
<th>Pin Num</th>
<th>Pin Name</th>
<th>I/O</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GATE</td>
<td>O</td>
<td>Totem-pole gate driver output to drive the external MOSFET.</td>
</tr>
<tr>
<td>2</td>
<td>GND</td>
<td>P</td>
<td>Ground</td>
</tr>
<tr>
<td>3</td>
<td>VDD</td>
<td>P</td>
<td>IC power supply pin.</td>
</tr>
<tr>
<td>4</td>
<td>CS</td>
<td>I</td>
<td>Current sense pin.</td>
</tr>
<tr>
<td>5</td>
<td>CC</td>
<td>O</td>
<td>Connect a capacitor between this pin and GND for CC regulation.</td>
</tr>
<tr>
<td>6</td>
<td>FB</td>
<td>I</td>
<td>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.</td>
</tr>
</tbody>
</table>