The AP7383/4 are ultra-low quiescent current (micro-power) wide input voltage range (AP7383 up to 30V, AP7384 up to 40V) low dropout regulators. This combined with their high accuracy (1% tolerance) makes them ideal for use in various USB and portable devices.

The AP7383 is available in 1.8V, 3.0V, 3.3V, 3.6V, 4.15V, 4.4V and 5.0V fixed output voltage versions. All variants are available in the space-saving SOT25 (with and without enable) and SOT89 (without enable) packages in green molding and are RoHS compliant.

The AP7484 is available in 2.8V, 3.3V, 5V and 7V fixed output voltage version. All variants are available in the space-saving SOT23, SOT89 and TO92 packages in green molding and are RoHS compliant.

The Diodes Advantage

The AP7383/4 maximizes system run times with their extremely low quiescent current.

- **Wide Input Voltage**: 3.5V to 30V for AP7383 and 3.5V to 40V for AP7384
  - Covers 5V, 9V and 12V power rails

- **Wide Output Voltage**: 1.8V to 5V for AP7383 and 2.8V to 7V for AP7384
  - Covers standard I/O voltage levels

- **Low Quiescent Current** at 1.8µA for AP7383 and 2.5µA for AP7384
  - Extends battery life battery operated products
  - Minimizes standby power in low-power systems

- **Two pin outs** in SOT25 and SOT89 for AP7383; SOT23, SOT89 and TO92 for AP7384
  - Matches industry standard footprints
  - Enable function extends battery life even further

- **1.0% Output Accuracy** at Room Temperature
  - Maintains accuracy under all conditions

- **Built-In Over-Temperature Protection (OTP) Function**
  - Protects system from over-temperature conditions

Application

- Battery-Powered Equipment
- Tablets
- Ruggedized PC
- Notebook Computers
- Portable Information Appliances
- Meters
**Typical Application Circuit**

![Typical Application Circuit](image_url)

**Product Portfolio**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>$V_{IN}$ (V)</th>
<th>$V_{OUT}$ (V)</th>
<th>$I_{OUT}$ (mA)</th>
<th>$V_{DROP}$ @ Full Load (mV)</th>
<th>$I_{Q}$ (µA)</th>
<th>Output Accuracy (%)</th>
<th>Enable</th>
<th>BYPASS Cap</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP7383-XXY-13</td>
<td>3.5 to 30</td>
<td>1.8, 3.0, 3.3, 3.6, 4.15, 4.4, 5.0</td>
<td>150</td>
<td>1,100</td>
<td>1.8</td>
<td>1</td>
<td>No</td>
<td>No</td>
<td>SOT89</td>
</tr>
<tr>
<td>AP7383-XXW5-7</td>
<td></td>
<td>2.8, 3.3, 5.0, 7.0</td>
<td>50</td>
<td>1,000</td>
<td>2.5</td>
<td>2</td>
<td>No</td>
<td>No</td>
<td>SOT92</td>
</tr>
</tbody>
</table>

To find out more information:
- [https://www.diodes.com/part/AP7383](https://www.diodes.com/part/AP7383)
- [https://www.diodes.com/part/AP7384](https://www.diodes.com/part/AP7384)

**Ordering Information**

- **AP7383 - X X - X**
  - Output Voltage: 18 : 1.8V, 30 : 3.0V, 33 : 3.3V, 36 : 3.6V, 41 : 4.15V, 44 : 4.4V, 50 : 5.0V
  - Package: W5/WR : SOT25, Y : SOT89 (Option 2)
  - Packing: 7/13 : Tape & Reel

- **AP7384 - X X - X**
  - Output Voltage: 33 : 3.3V, 50 : 5.0V, 28 : 2.8V, 70 : 7.0V
  - Package: V : TO92 (Ammo Packing), Y : SOT89 (Option 2), SA : SOT23
  - Packing: 7/13 : Tape & Reel, A : Ammo