The AP7380 is an ultra-low quiescent current (Micro-Power) wide input voltage range (up to 24Vin) low dropout regulator. This, combined with its high accuracy (1% tolerance) make it ideal for use in various USB Power, portable devices and industrial applications.

The AP7380 is available in 3.0V, 3.3V, 4.15V, 4.4V and 5.0V fixed output voltage versions. All are available in SOT25 (with and without enable) and SOT89 (without enable) packages in green molding and are RoHS compliant.

The Diodes Advantage

The AP7380 maximizes system run times with its extremely low quiescent current

- Wide Input Voltage: 3.5V to 24V
  Covers 5V, 9V and 12V power rails with good transient withstand

- Wide fixed Output Voltage variants: 3.0V, 3.3V, 4.15V, 4.4V and 5.0V
  Covers standard I/O voltage levels

- Low Quiescent Current at 1.8µA
  Extends battery life battery operated products
  Minimizes standby power in low-power systems

- Two pin-outs in SOT25
  Matches industry standard footprints
  Enable function on one extends battery life even further

- 1% 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
- Portable Instrumentation
- Ruggedized PC/Tablets
- Notebook Computers
- Home Appliances
- eMeters
Typical Application Circuit

Product Portfolio

<table>
<thead>
<tr>
<th>Part Number</th>
<th>$V_{IN}$ (V)</th>
<th>$V_{OUT}$ (V)</th>
<th>$I_{OUT}$ @ Full Load (mA)</th>
<th>$V_{DROP}$ @ Full Load (mV)</th>
<th>$I_{O}$ (µA)</th>
<th>Output Accuracy (%)</th>
<th>Enable</th>
<th>BYPASS Cap</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP7380-XXY-13</td>
<td>3.5 to 24</td>
<td>3.0, 3.3, 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>AP7380-XXW5-7</td>
<td>3.5 to 24</td>
<td>3.5 to 24</td>
<td>150</td>
<td>1,100</td>
<td>1.8</td>
<td>1</td>
<td>Yes</td>
<td>No</td>
<td>SOT25</td>
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<tr>
<td>AP7380-XXWR-7</td>
<td>3.5 to 24</td>
<td>3.5 to 24</td>
<td>150</td>
<td>1,100</td>
<td>1.8</td>
<td>1</td>
<td>No</td>
<td>No</td>
<td>SOT25</td>
</tr>
</tbody>
</table>

Datasheet: [https://www.diodes.com/assets/Datasheets/AP7380.pdf](https://www.diodes.com/assets/Datasheets/AP7380.pdf)

Ordering Information

Output Voltage
- 30 : 3.0V
- 33 : 3.3V
- 41 : 4.15V
- 44 : 4.4V
- 50 : 5.0V

Package
- W5/WR : SOT25
- Y : SOT89 (Option 2)

Packing
- 7/13 : Tape & Reel