The AL8806 is Diodes’ latest buck LED driver and drives LEDs with constant current up to 1.5A.

With its 30V maximum operating voltage it can drive up to 8 LEDs. With its minimum of 6V it comfortably operates at 12V\text{AC/DC} rails.

The thermally enhanced MSOP-8EP (green molding) package enables the AL8806 to maintain its high drive capability over a wider ambient temperature range.

The AL8806 switches at frequency up to 1000kHz. This allows the use of small size external components. The small package size coupled with the need for only 4 external components produces a small solution footprint.

The accuracy, temperature range and cost make it ideally suited to cost sensitive lighting applications.

The Diodes advantage

\begin{itemize}
  \item \textbf{30V 1.5A LED drive capability} \\
  Drives up to 8 LEDs in series and provides cost effective solution for MR16 and other 12V\text{AC/DC} systems

  \item \textbf{Small footprint thermally enhanced MSOP-8EP package} \\
  High power density small PCB footprint solution

  \item \textbf{5\% initial average LED current accuracy} \\
  Meets accuracy requirements of most lighting apps at cost effective price and improves inter-channel matching.

  \item \textbf{Simple digital PWM dimming with DC dimming on the CTRL pin} \\
  Provides flexible scheme to users with different dimming methods: DC for thermal control, PWM for brightness control

  \item \textbf{High switching frequency up to 1MHz} \\
  Small inductance value and size reducing overall solution size
\end{itemize}
Simple cost effective LED driver for high-current high-brightness LEDs

Typical Application: MR16 LED lamp

Diodes Medium Voltage High brightness LED Drivers

<table>
<thead>
<tr>
<th>Device</th>
<th>Packaging</th>
<th>Part mark</th>
<th>Reel size</th>
<th>Tape width</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL8806MP8-13</td>
<td>MSOP-8EP</td>
<td>Y W X E AL8806</td>
<td>13&quot;</td>
<td>12mm</td>
<td>2500</td>
</tr>
</tbody>
</table>

All variants are in packages that are "Green" Molding Compound (No Br, Sb) with Lead Free Finish/RoHS Compliant (Note 1)
Notes: 1. EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied, see EU Directive 2002/95/EC Annex Codes for date coding on part marks
Y Year 0~9 W A~Z week 1~26 a~z week 27~53 X: A~Z: Internal code