Bivar Surface Mount 1206 package LED may be used in nearly any lighting or indication application. The miniature package is ideal for small scale applications such as general indication and backlighting. Low power consumption and excellent long life reliability are suitable for battery powered equipment. Bivar offers water clear LED lens for maximum luminous intensity. Wide variety of wavelength and intensity combinations are available to meet any illumination need. The SM1206 LED is packaged in standard tape and reels for pick and place assemblies.

---

### Part Number | Material | Emitted Color | Peak Wavelength λp(nm) TYP. | Lens Appearance | Luminous Intensity (mcd) TYP. | Viewing Angle
---|---|---|---|---|---|---
SM1206GC | AlGaInP | GREEN | 568 | Water Clear | 15 | 140°

---

### Outline Dimensions

- **Part Number**: SM1206GC
- **Material**: AlGaInP
- **Emitted Color**: GREEN
- **Peak Wavelength**: λp(nm) TYP. = 568
- **Lens Appearance**: Water Clear
- **Luminous Intensity**: (mcd) TYP. = 15
- **Viewing Angle**: 140°

---

**Outline Drawings Notes:**
1. All dimensions are in inches [millimeters].
2. Standard tolerance: ±0.010” unless otherwise noted.
Absolute Maximum Ratings

$T_A = 25^\circ C$ unless otherwise noted

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Dissipation</td>
<td>78 mW</td>
</tr>
<tr>
<td>Forward Current (DC)</td>
<td>30 mA</td>
</tr>
<tr>
<td>Peak Forward Current $^1$</td>
<td>100 mA</td>
</tr>
<tr>
<td>Reverse Voltage</td>
<td>5 V</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-30 ~ +80$^\circ$C</td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>-40 ~ +85$^\circ$C</td>
</tr>
<tr>
<td>Lead Soldering Temperature (3 mm from the base of the epoxy bulb) $^2$</td>
<td>260$^\circ$C</td>
</tr>
</tbody>
</table>

Notes: 1. 10% Duty Cycle, Pulse Width ≤ 0.1 msec. 2. Solder time less than 5 seconds at temperature extreme.

Electrical / Optical Characteristics

$T_A = 25^\circ C$ & $I_F = 20$ mA unless otherwise noted

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Forward Voltage (V)$^1$</th>
<th>Recommend Forward Current (mA)</th>
<th>Reverse Current (µA)</th>
<th>Dominant Wavelength (nm)$^2$</th>
<th>Luminous Intensity $I_v$ (mcd)</th>
<th>Viewing Angle $2 \Theta$ $\frac{1}{2}$ (deg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MIN</td>
<td>TYP</td>
<td>MAX</td>
<td>MIN</td>
<td>TYP</td>
<td>MAX</td>
</tr>
<tr>
<td>SM1206GC</td>
<td>/</td>
<td>2.1</td>
<td>2.6</td>
<td>/</td>
<td>20</td>
<td>/</td>
</tr>
</tbody>
</table>

Notes: 1. Tolerance of forward voltage : ±0.05V. 2. Tolerance of dominant wavelength : ±1.0nm.
Typical Electrical / Optical Characteristics

$T_A = 25^\circ\text{C}$ unless otherwise noted
Recommended Soldering Conditions

![Soldering Profile Graph]

**Tape and Reel Dimensions**

*Note: 3000 pcs/Reel*

**Outline Drawings Notes:**
1. All dimensions are in inches [millimeters].
2. Standard tolerance: ±0.010° unless otherwise noted.
Packaging and Labeling Plan
Note: 1 Reel / Bag

Vacuum and Heat Sealed
Clear AntiStatic Poly Bag

Humidity Indicator Card
Desiccant

Outline Drawings Notes:
1. All dimensions are in inches [millimeters].
2. Standard tolerance unless otherwise noted: X.XXX ± 0.010"
   X.X ± 0.1"

Part No. XXXX-XXX-XXX
Prod. No. XXXX-XXX-XXX
PO No. XXXX
Lot No. XXXXXXXX
Q'ty: X.XXX PCS
Q.C. XXX BIN
Date: 2008.XX.XX

Bivar Standard Packaging Label

Bivar reserves the right to make changes at any time without notice.