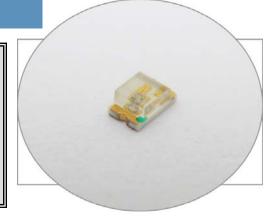
BIVAR



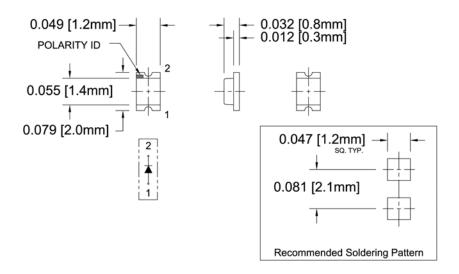
- ♦ Industry Standard 0805 Package
- **♦** RoHS Compliant
- Small Package and Footprint
- ♦ Water Clear Lens
- **♦ Wide Viewing Angle**
- ♦ Ideal for Status Indication, Display, and Backlighting



Bivar Surface Mount 0805 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 SM0805 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 |
|-------------|----------|---------------|-----------------------------------|--------------------|-------------------------------------|---------------|
| SM0805PGC | GaP | GREEN | 555 | Water Clear | 4.5 | 130° |

Outline Dimensions



Outline Drawings Notes:

- 1. All dimensions are in inches [millimeters].
- 2. Standard tolerance: ±0.010" unless otherwise noted.







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



Absolute Maximum Ratings

T_A = 25°C unless otherwise noted

| Power Dissipation | 78 mW |
|--|-------------|
| Forward Current (DC) | 30 mA |
| Peak Forward Current ¹ | 100 mA |
| Reverse Voltage | 5 V |
| Operating Temperature Range | -30 ~ +80°C |
| Storage Temperature Range | -40 ~ +85°C |
| Lead Soldering Temperature (3 mm from the base of the epoxy bulb) ² | 260°C |

Notes: 1. 10% Duty Cycle, Pulse Width ≤ 0.1 msec.

2. Solder time less than 5 seconds at temperature extreme.

Electrical / Optical Characteristics

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

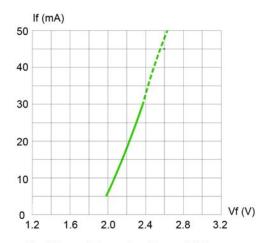
| Part Number | Forward Voltage (V) ¹ | | Recommend Forward Current (mA) | | Reverse Current (µA) | Dominant | | Luminous Intensity Iv (mcd) | | | Viewing Angle 2 Θ ½ (deg) | | | |
|-------------|-------------------------------------|-----|--------------------------------------|-----|----------------------------|----------|-----|--------------------------------|-----|-----|------------------------------------|-----|-----|-----|
| | MIN | TYP | MAX | MIN | TYP | MAX | MAX | MIN | TYP | MAX | MIN | TYP | MAX | TYP |
| SM0805PGC | / | 2.0 | 2.6 | / | 20 | / | 10 | / | 555 | / | 1 | 4.5 | / | 130 |

Notes: 1. Tolerance of forward voltage: ±0.05V. 2. Tolerance of dominant wavelength: ±1.0nm.



Typical Electrical / Optical Characteristics

T_A = 25°C unless otherwise noted



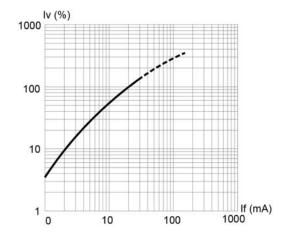
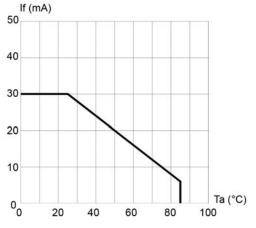


Fig. 1 Forward Current vs. Forward Voltage

Fig. 2 Relative Luminous Intensity vs. Forward Current



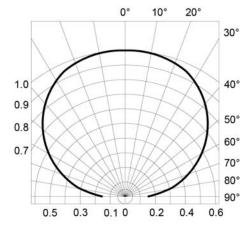
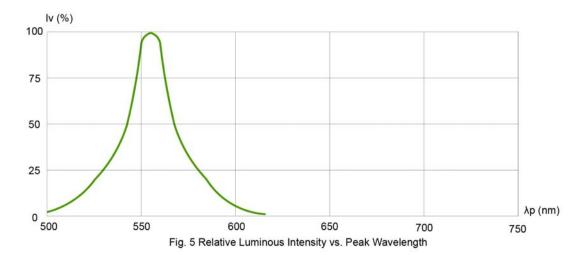


Fig. 3 Forward Current vs. Temperature

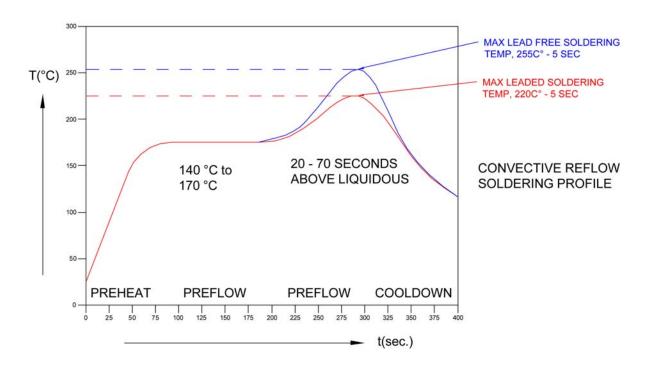
Fig. 4 Directivity Radiation Diagram



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

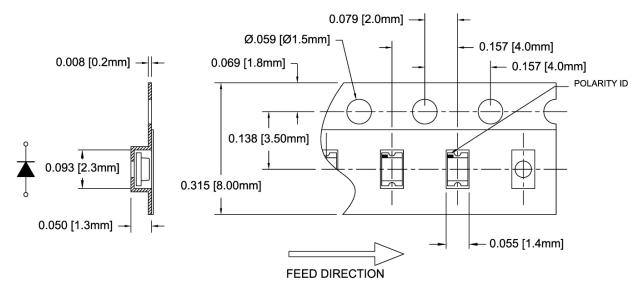


Recommended Soldering Conditions



Tape and Reel Dimensions

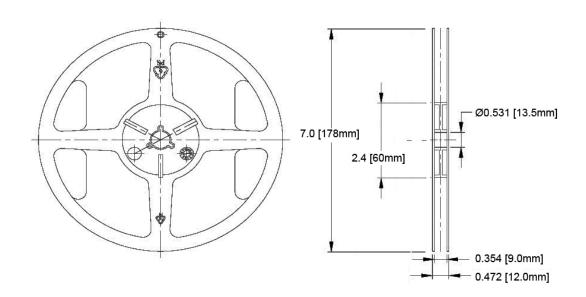
Note: 4000 pcs/Reel



Outline Drawings Notes:

- 1. All dimensions are in inches [millimeters].
- 2. Standard tolerance: ±0.010" unless otherwise noted.

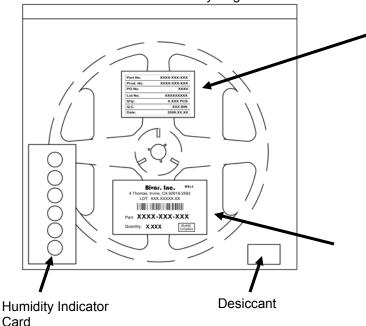




Packaging and Labeling Plan

Note: 1 Reel / Bag

Vacuum and Heat Sealed Clear AntiStatic Poly Bag



Outline Drawings Notes:

1. All dimensions are in inches [millimeters].

2. Standard tolerance unless otherwise noted: X.XXX ± 0.010"

 $X.XXX \pm 0.010$ $X.X \pm 0.1$

| 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 |

Internal Quality Control

Bivar. Inc.

MSL4

4 Thomas, Irvine, CA 92618-2593 LOT: XXX.XXXXXXXX



Part: XXXX-XXX

Quantity: X.XXX

RoHS Compliant

Bivar Standard Packaging Label

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Standard LEDs - SMD category:

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Other Similar products are found below:

LTST-C19GD2WT LTST-N683GBEW LTW-170ZDC LTW-M140SZS40 598-8110-100F 598-8170-100F 598-8610-202F 67
22VRVGC/TR8 AAAF5060QBFSEEZGS HLMP-6305-L0011 ALMD-LB36-SV002 APT1608QGW 15-21UYC/S530-A3/TR8

EASV1803BA0 LS A676-P2S1-1 SML310BATT86 SML-512VWT86A SML-LX0606SISUGC/A SML-LXL1307SRC-TR SML
LXR851SIUPGUBC LT1ED53A FAT801-S AM27ZGC03 APB3025SGNC APFA3010SURKCGKQBDC APHK1608VGCA

APT2012QGW CLX6D-FKB-CN1R1H1BB7D3D3 LTST-C250KGKT LTW-020ZDCG LTW-21TS5 LTW-220DS5 JANTXM19500/521-02

UYGT801-S LO T67F-V1AB-24-1 YGFR411-H SML-LX0402IC-TR CMDA20AYAA7D1S CMDA16AYDR7A1X 339
1SURSYGW/S530-A2 598-8040-100F 598-8070-100F 598-8140-100F 598-8610-200F EAPL3527GA5 67-11/BHC-M1N2B8Y/2A0 SML
LXL1209SYC/ATR EASV3020YGA0 EAST16086YA5 CMD91-21VRC/TR7