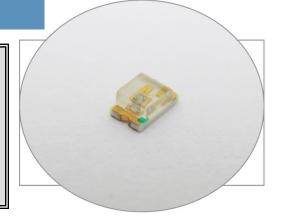
SURFACE MOUNT LED GREEN, 0805 PACKAGE

BIVAR



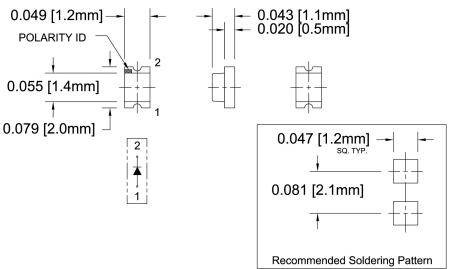
- ♦ Industry Standard 0805 Package
- **♦** RoHS Compliant
- Small Package and Footprint
- ♦ Water Clear Lens
- ♦ Wide Viewing Angle
- ♦ Ideal for Status Indication, Display, and Backlighting



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	
SM0805GC	AlGaInP	GREEN	568	Water Clear	15	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

SURFACE MOUNT LED GREEN, 0805 PACKAGE



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

 $T_A = 25$ °C & $I_F = 20$ 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
SM0805GC	1	2.1	2.6	/	20	/	10	1	565	/	6	15	/	130

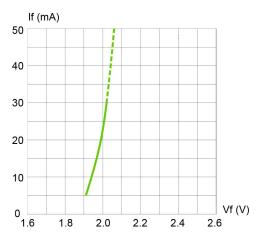
Notes: 1. Tolerance of forward voltage: ±0.05V. 2. Tolerance of dominant wavelength: ±1.0nm.

SURFACE MOUNT LED GREEN, 0805 PACKAGE



Typical Electrical / Optical Characteristics

T_A = 25°C unless otherwise noted



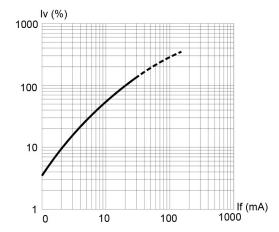
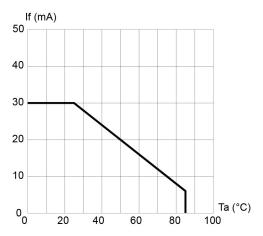


Fig. 1 Forward Current vs. Forward Voltage

Fig. 2 Relative Luminous Intensity vs. Forward Current



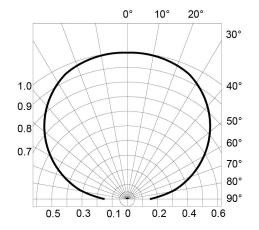
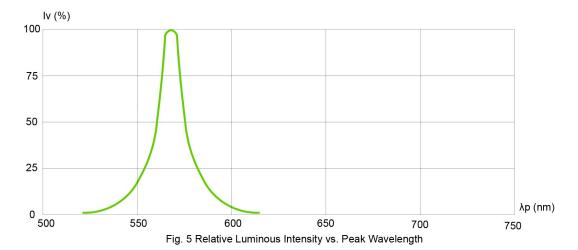


Fig. 3 Forward Current vs. Temperature

Fig. 4 Directivity Radiation Diagram

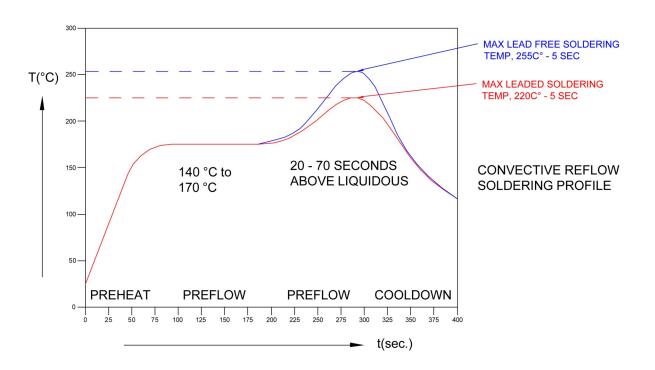


Bivar reserves the right to make changes at any time without notice.

SURFACE MOUNT LED GREEN, 0805 PACKAGE

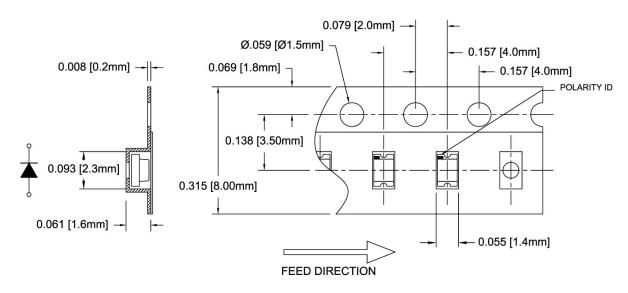


Recommended Soldering Conditions



Tape and Reel Dimensions

Note: 3000 pcs/Reel

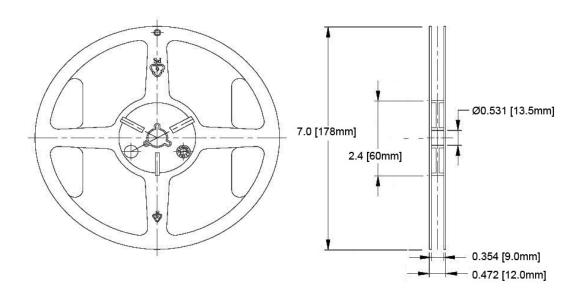


Outline Drawings Notes:

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

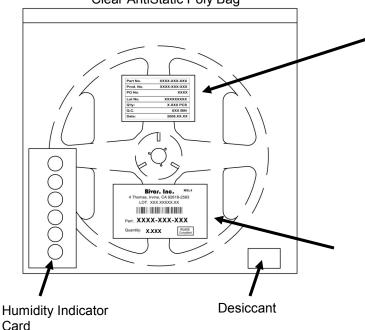
SURFACE MOUNT LED GREEN, 0805 PACKAGE





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 ± 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

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

BIVAR: SM0805GC