

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Email & Skype: info@chipsmall.com Web: www.chipsmall.com

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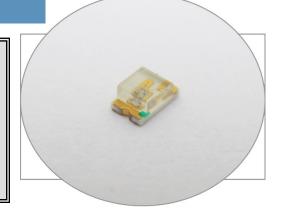




BIVAR

SM0805GCL

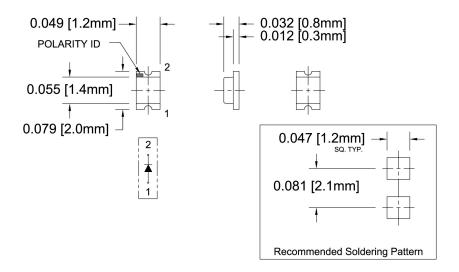
- ♦ Industry Standard 0805 Package
- **♦** RoHS Compliant
- Small Package and Footprint
- ♦ Low Current, 2mA
- Water Clear Lens
- Wide Viewing Angle
- Ideal for Status Indication, Display, and Backlighting



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
SM0805GCL	AlGaInP	GREEN	575	Water Clear	3.6	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

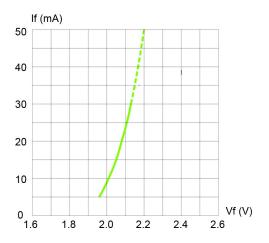
 $T_A = 25$ °C & $I_F = 2$ mA unless otherwise noted

Part Number	Forward ber Voltage (V) ¹		Recommend Forward Current (mA)		Reverse Current (µA)	Dominant Wavelength (nm) ²		Luminous Intensity Iv (mcd)			Viewing Angle 2 Θ ½ (deg)			
	MIN	TYP	MAX	MIN	TYP	MAX	MAX	MIN	TYP	MAX	MIN	TYP	MAX	TYP
SM0805GCL	1	1.9	2.3	/	2	/	10	1	574	1	1.2	3.6	/	130

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



Typical Electrical / Optical Characteristics $T_A = 25^{\circ}C$ unless otherwise noted



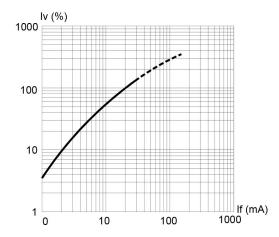
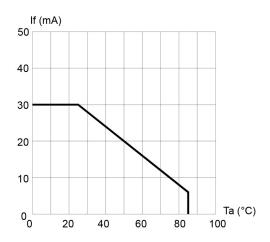


Fig. 1 Forward Current vs. Forward Voltage

Fig. 2 Relative Luminous Intensity vs. Forward Current



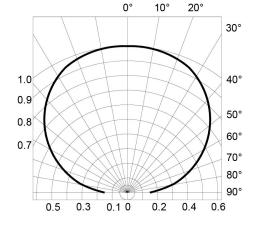
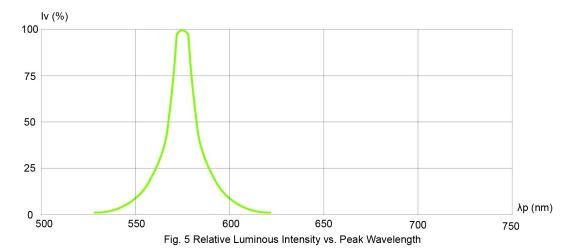


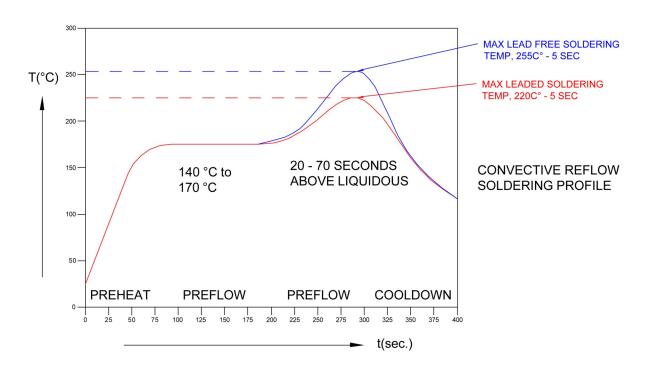
Fig. 3 Forward Current vs. Temperature

Fig. 4 Directivity Radiation Diagram



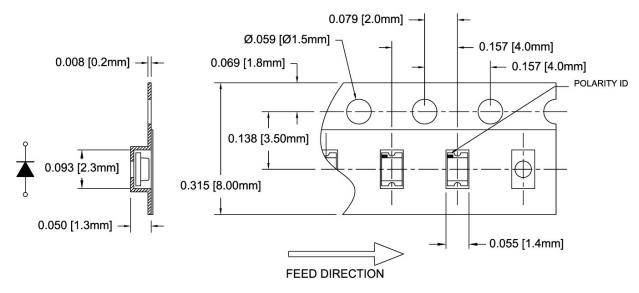


Recommended Soldering Conditions



Tape and Reel Dimensions

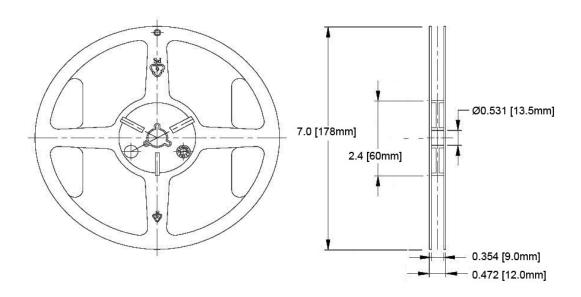
Note: 4000 pcs/Reel



Outline Drawings Notes:

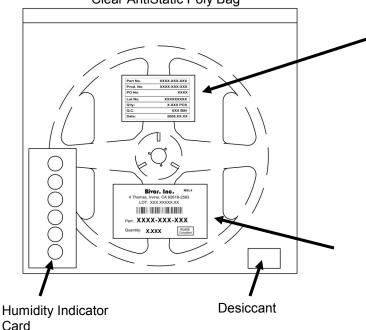
- All dimensions are in inches [millimeters].
 Standard tolerance: ±0.010" unless otherwise noted.





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