BIVAR



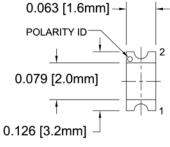
- ♦ Industry Standard 1206 Package
- **♦** RoHS Compliant
- ♦ Small Package and Footprint
- **♦** Water Clear Lens
- **♦ Wide Viewing Angle**
- ♦ Ideal for Status Indication, Display, and Backlighting

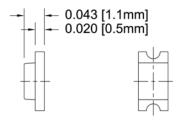


Bivar Surface Mount 1206 package LED may be used in nearly any lighting or indication application. The miniature package is ideal for small scale applications such as general indication and backlighting. Low power consumption and excellent long life reliability are suitable for battery powered equipment. 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.

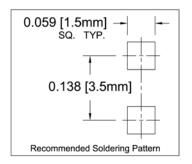
Part Number	Material	Emitted Color	Peak Wavelength λp(nm) TYP.	Lens Appearance	Luminous Intensity (mcd) TYP.	Viewing Angle
SM1206RC	GaP	RED	700	Water Clear	.9	140°

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

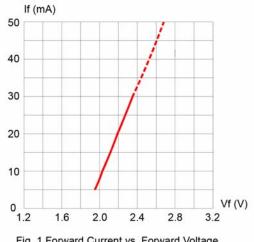
Part Number	Forward Voltage (V) ¹		Recommend Forward Current (mA)		Reverse Current (µA)	D	Dominant Wavelength (nm) ²		Luminous Intensity Iv (mcd)		Viewing Angle 2 Θ ½ (deg)			
	MIN	TYP	MAX	MIN	TYP	MAX	MAX	MIN	TYP	MAX	MIN	TYP	MAX	TYP
SM1206RC	/	2.0	2.6	/	20	/	10	1	645	/	.1	.9	/	140

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



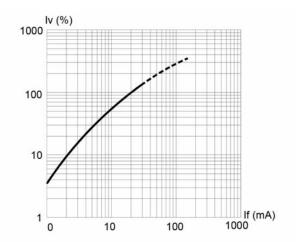
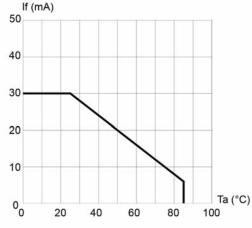


Fig. 1 Forward Current vs. Forward Voltage

Fig. 2 Relative Luminous Intensity vs. Forward Current



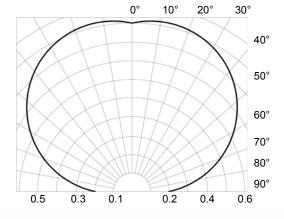
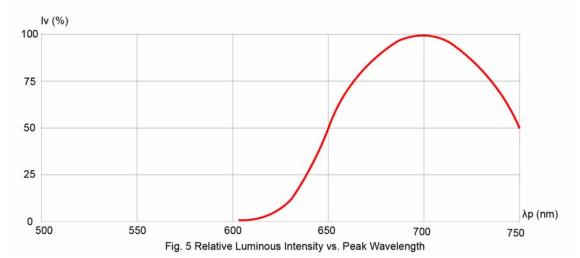


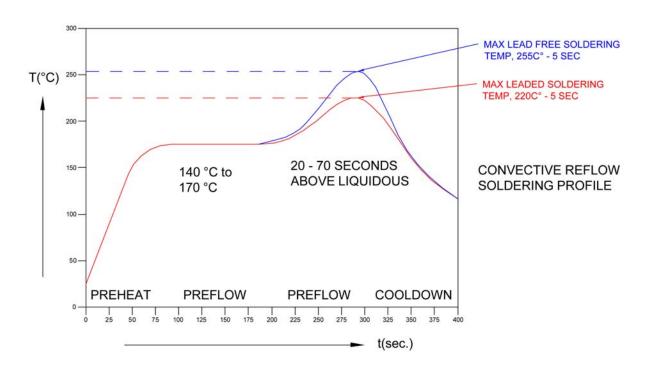
Fig. 3 Forward Current vs. Temperature

Fig. 4 Directivity Radiation Diagram



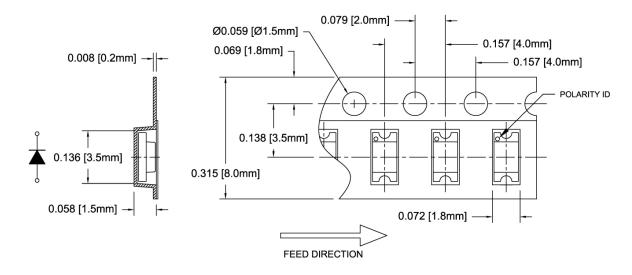


Recommended Soldering Conditions



Tape and Reel Dimensions

Note: 3000 pcs/Reel

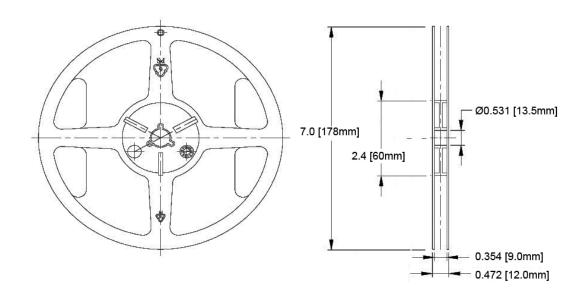


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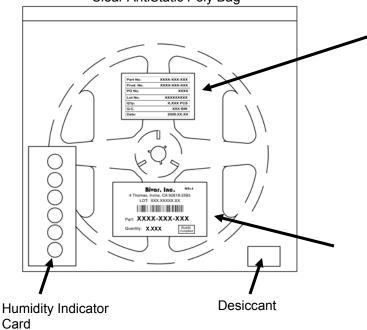




Packaging and Labeling Plan

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"

 $X.XXX \pm 0.01$ $X.X \pm 0.1$ "

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

Mouser Electronics

Authorized Distributor

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

BIVAR: SM1206RC