

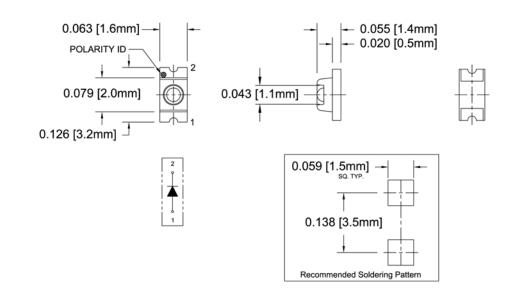
SM1206UYC-IL

- Industry Standard 1206 Package
- RoHS Compliant
- Water Clear Inner Lens
- High Luminous Intensity
- Narrow Viewing Angle
- Ideal for Status Indication, Display, and Backlighting

Bivar Surface Mount 1206 Inner Lens package LED may be used in nearly any lighting or indication application. The water clear inner lens provides a narrow viewing angle and high luminous intensity making it suitable for small scale applications such as display, backlighting, and general indication. Low power consumption and excellent long life reliability are ideal for battery powered equipment. Wide variety of wavelength and intensity combinations are available to meet any illumination need. The SM1206-IL 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
SM1206UYC-IL	AlGaInP	YELLOW	593	Water Clear	270	30°

Outline Dimensions



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

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 \leq 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

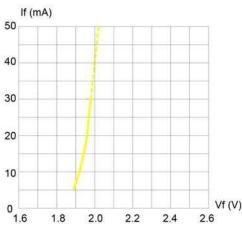
Part Number		orwai Itage	-	F	comm orwai rrent (rd	Reverse Current (µA)	Dominant Wavelength (nm) ²			Luminous Intensity Iv (mcd)			Viewing Angle 2 O ½ (deg)
	MIN	ΤΥΡ	MAX	MIN	ΤΥΡ	MAX	MAX	MIN	TYP	MAX	MIN	TYP	MAX	ТҮР
SM1206UYC-IL	/	2.1	2.6	1	20	/	10	/	592	/	100	270	/	30

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



Typical Electrical / Optical Characteristics

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





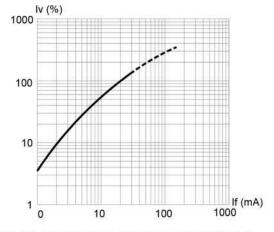


Fig. 2 Relative Luminous Intensity vs. Forward Current

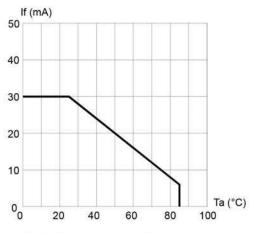


Fig. 3 Forward Current vs. Temperature

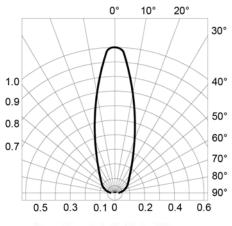
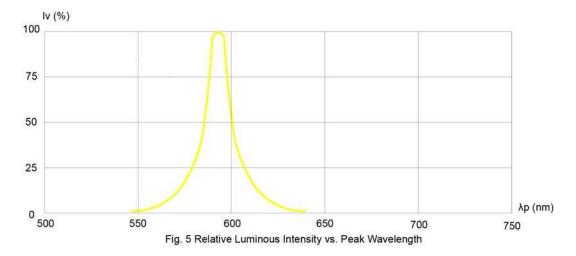
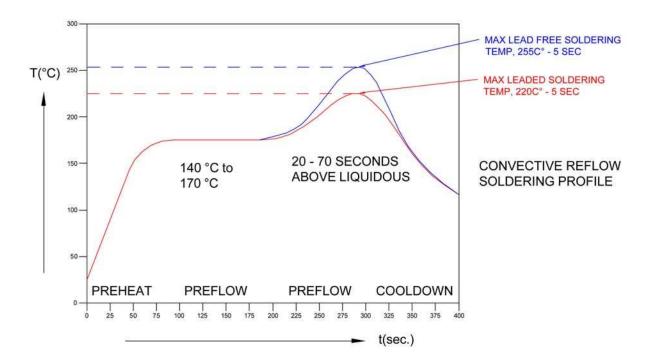


Fig. 4 Directivity Radiation Diagram

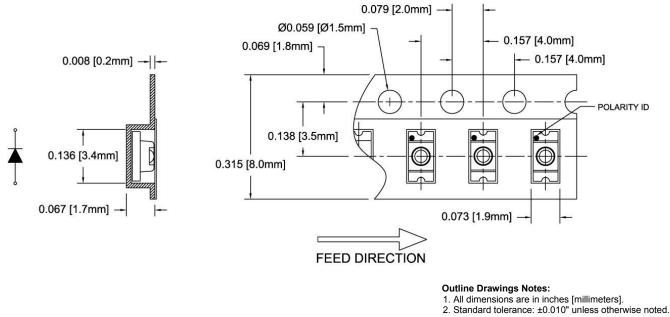




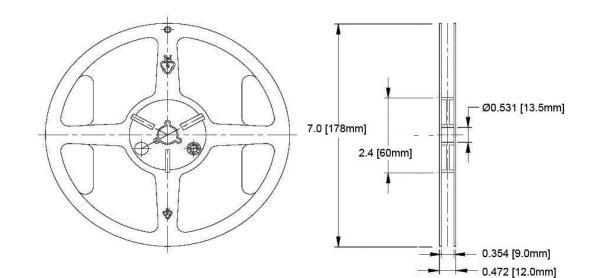
Recommended Soldering Conditions



Tape and Reel Dimensions Note: 3000 pcs/Reel





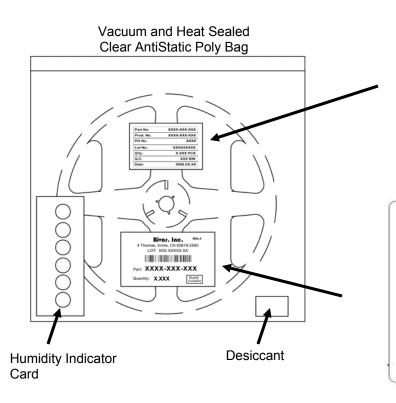


Outline Drawings Notes:

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

X.XXX ± 0.010 X.X ± 0.1"

Packaging and Labeling Plan Note: 1 Reel / Bag



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

Internal Quality Control

Bivar. Inc.	MSL4
4 Thomas, Irvine, CA 92618	3-2593
LOT: XXX.XXXXX.XX	<
Part: XXXX-XXX-X	XX
Quantity: X.XXX	RoHS Compliant

Bivar Standard Packaging Label