SURFACE MOUNT LED
AMBER/GREEN, 1210 PACKAGE

BIVAR

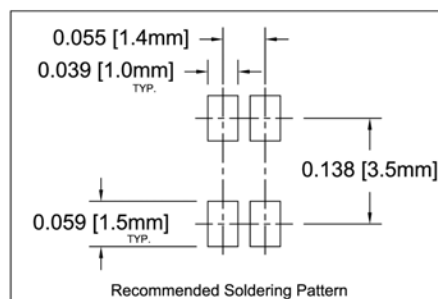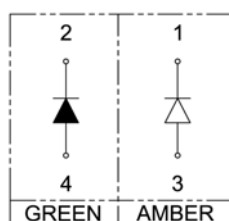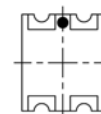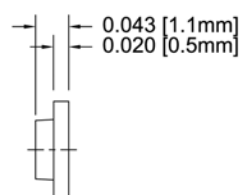## SM1210BC-A/G

♦ **Industry Standard Package**
♦ **RoHS Compliant**
♦ **Two Chips in One Package**
♦ **Water Clear Lens**
♦ **Wide Viewing Angle**
♦ **Ideal for Status Indication and Lighting**

Bivar Surface Mount 1210 package Bi-Color LED combines two chips in a single package. They are ideal for small scale applications where multiple signals need to be displayed. When needed, the third color can be created by powering up both chips together. Bivar offers water clear LED lens for high luminous intensity and wide viewing angles. Wide variety of color and intensity combinations are available to meet any illumination need. The SM1210 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
SM1210BC-A/G	GaAsP	AMBER	610	Water Clear	15	130°
	GaP	GREEN	568		15	

Outline Dimensions

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

ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES

RoHS Compliant

Moisture Sensitivity Level 4

Bivar, Inc. — 4 Thomas, Irvine, California 92618, U.S.A.
Phone: (949) 951-8808 Fax: (949) 951-3974 E-mail: bivar@bivar.com Web: www.bivar.com

Revision A 03/09
Page 1 of 5

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	Emitted color	Forward 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
SM1210BC-A/G	AMBER	/	2.0	2.6	/	20	/	10	/	607	/	7.2	15	/	130
	GREEN	/	2.0	2.6	/	20	/	10	/	570	/	6	15	/	130

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

Typical Electrical / Optical Characteristics
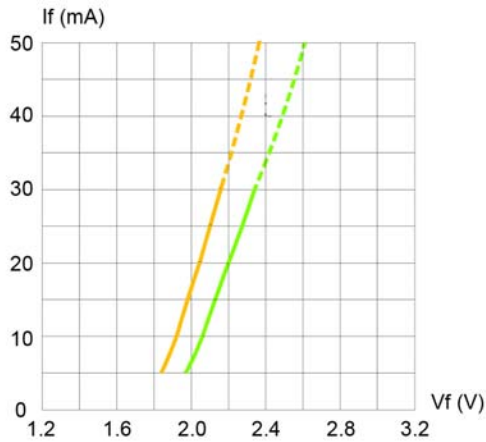
$T_A = 25°C$ unless otherwise noted
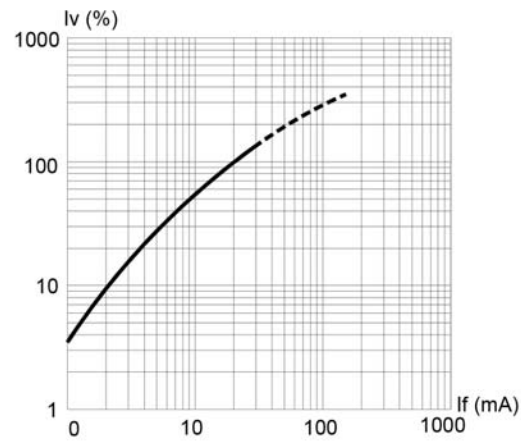
Fig. 1 Forward Current vs. Forward Voltage

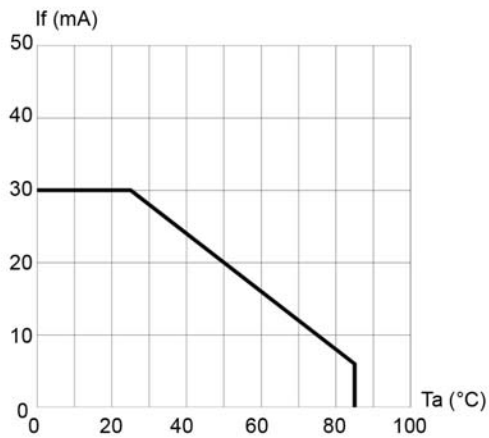Fig. 2 Relative Luminous Intensity vs. Forward Current

Fig. 3 Forward Current vs. Temperature

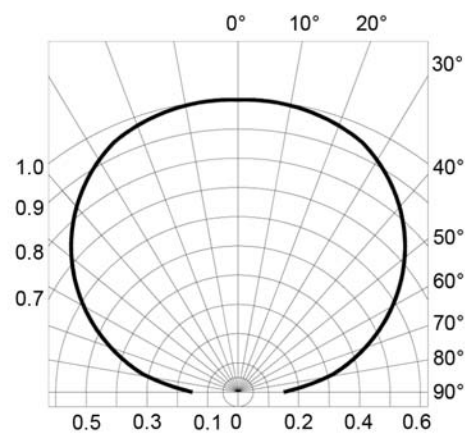Fig. 4 Directivity Radiation Diagram

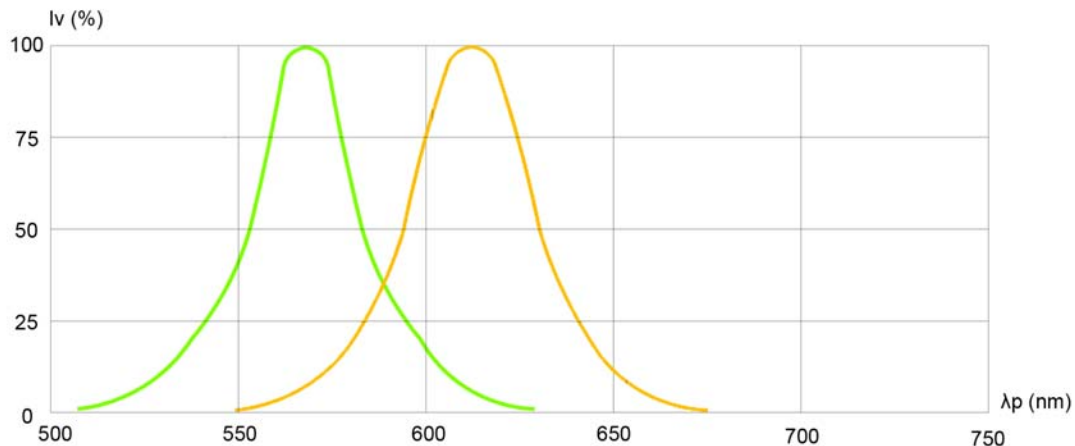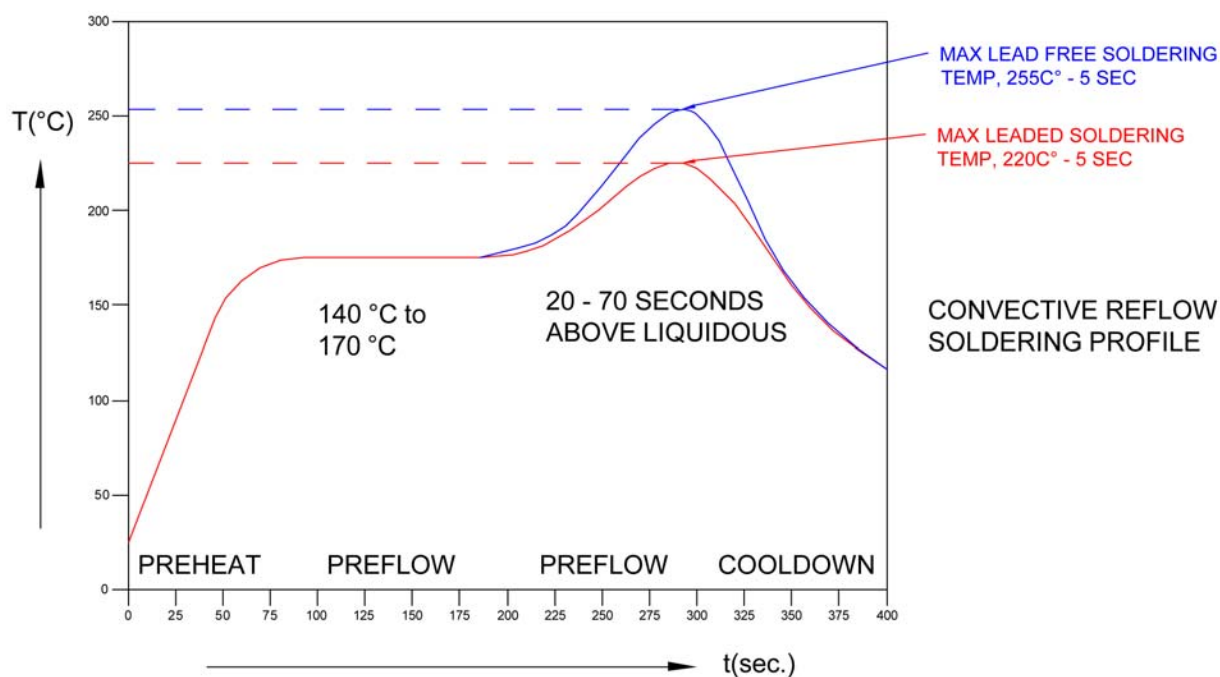Fig. 5 Relative Luminous Intensity vs. Peak Wavelength

Recommended Soldering Conditions

Tape and Reel Dimensions
Note: 3000 pcs/Reel
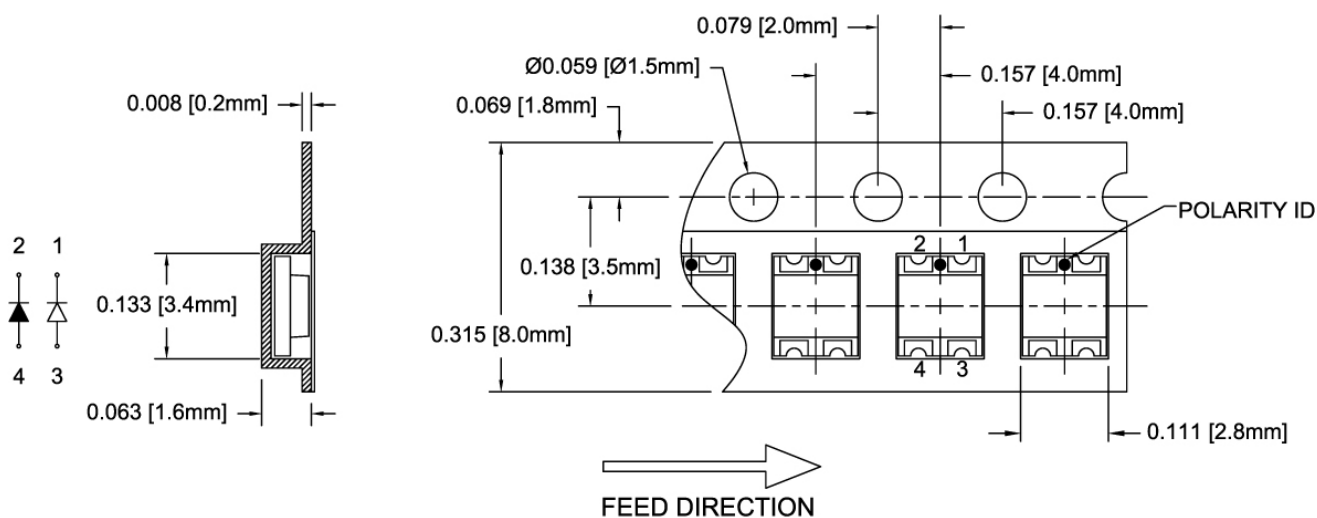
FEED DIRECTION

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

Bivar, Inc. — 4 Thomas, Irvine, California 92618, U.S.A.
Phone: (949) 951-8808   Fax: (949) 951-3974   E-mail: bivar@bivar.com   Web: www.bivar.com

Revision A   03/09
Page 4 of 5

7.0 [178mm]

2.4 [60mm]

Ø0.531 [13.5mm]

0.354 [9.0mm]
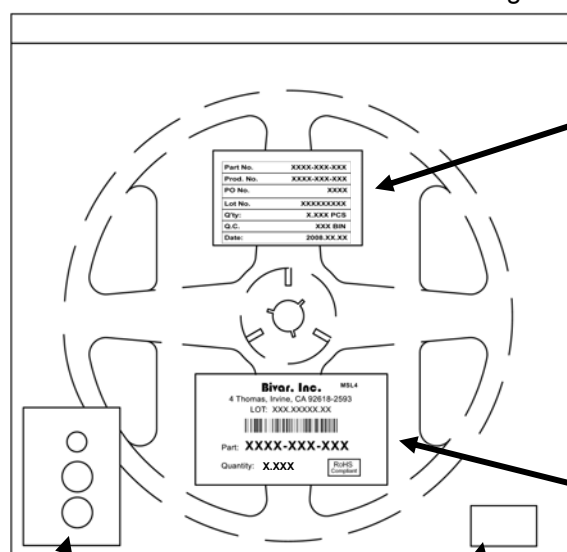
0.472 [12.0mm]

Outline Drawings Notes:
1. All dimensions are in inches [millimeters].
2. Standard tolerance unless otherwise noted: X.XXX ± 0.010"
   X.X ± 0.1"

Packaging and Labeling Plan
Note: 1 Reel / Bag

Sealed ESD and Moisture Barrier Bag

Humidity Indicator Card

Desiccant

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 Label

Bivar, Inc. MSL4
4 Thomas, Irvine, CA 92618-2593
LOT: XXX.XXXXX.XX

Part: **XXXX-XXX-XXX**

Quantity: **X.XXX**   RoHS Compliant

Bivar Standard Packaging Label

Bivar, Inc. — 4 Thomas, Irvine, California 92618, U.S.A.
Phone: (949) 951-8808   Fax: (949) 951-3974   E-mail: bivar@bivar.com   Web: www.bivar.com

Revision A   03/09
Page 5 of 5

Mouser Electronics

Authorized Distributor

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

[BIVAR](#):
  [SM1210BC-A/G](#)