

### **Absolute Maximum Ratings**

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

Power Dissipation	Red - 69 mW Yellow - 78 mW
Forward Current ( DC )	30 mA
Peak Forward Current <sup>1</sup>	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 ) <sup>2</sup>	260°C

Notes: 1. 10% Duty Cycle, Pulse Width ≤ 0.1 msec.

### **Electrical / Optical Characteristics**

 $T_A = 25$ °C &  $I_F = 20$  mA unless otherwise noted

Part Number	art Number Emitted color		Forward Voltage (V) <sup>1</sup>			Recommend Forward Current (mA)		Reverse Current (µA)	I 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
SM1210BC	RED	/	1.85	2.3	1	20	/	10	/	643	1	6	15	1	130
SWIZIODO	GREEN	1	2.3	2.6	1	20	1	10	1	570	1	8	15	1	130

Notes: 1. Tolerance of forward voltage: ±0.05V.

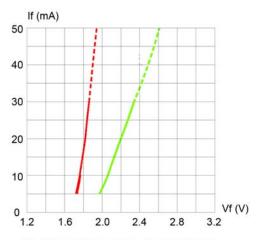
<sup>2.</sup> Solder time less than 5 seconds at temperature extreme.

<sup>2.</sup> Tolerance of dominant wavelength: ±1.0nm.



# **Typical Electrical / Optical Characteristics**

T<sub>A</sub> = 25°C unless otherwise noted



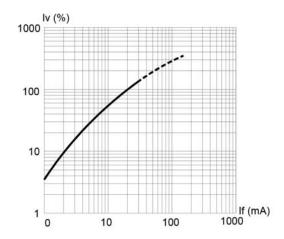
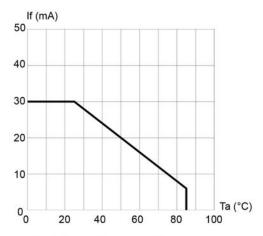


Fig. 1 Forward Current vs. Forward Voltage

Fig. 2 Relative Luminous Intensity vs. Forward Current



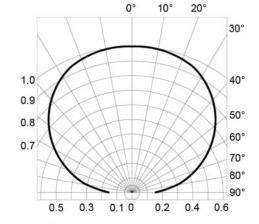
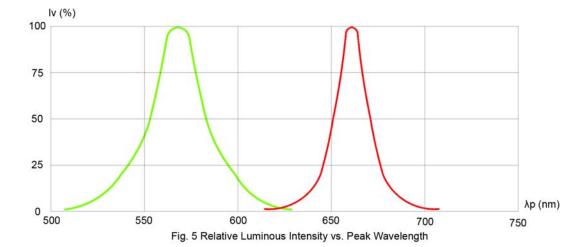


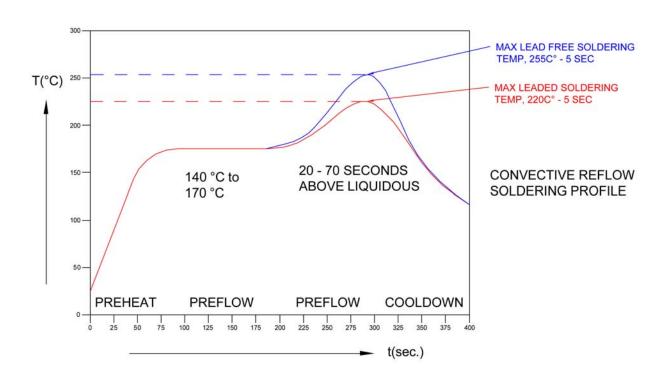
Fig. 3 Forward Current vs. Temperature

Fig. 4 Directivity Radiation Diagram



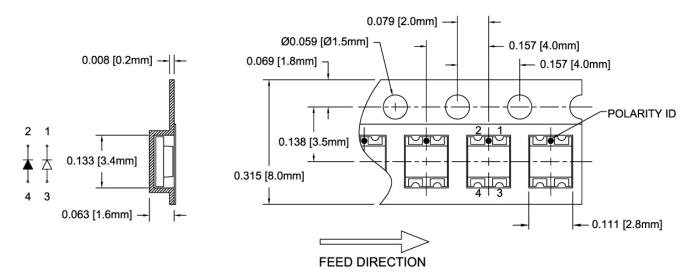


#### **Recommended Soldering Conditions**



### **Tape and Reel Dimensions**

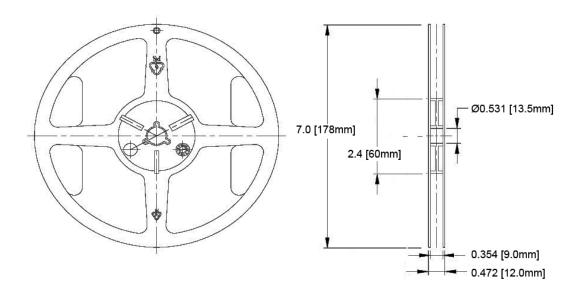
Note: 3000 pcs/Reel



#### Outline Drawings Notes:

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





#### **Outline Drawings Notes:**

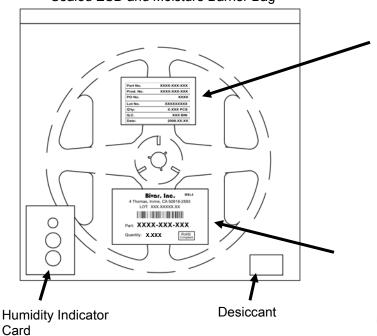
- 1. All dimensions are in inches [millimeters].
- 2. Standard tolerance unless otherwise noted: X.XXX ± 0.010"

 $X.XXX \pm 0.010$  $X.X \pm 0.1$ "

# Packaging and Labeling Plan

Note: 1 Reel / Bag

Sealed ESD and Moisture Barrier Bag



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 Label

Bivar. Inc. MSL4

4 Thomas, Irvine, CA 92618-2593 LOT: XXX.XXXXXXXX

Part: XXXX-XXX

Quantity: X.XXX

RoHS Compliant

Bivar Standard Packaging Label