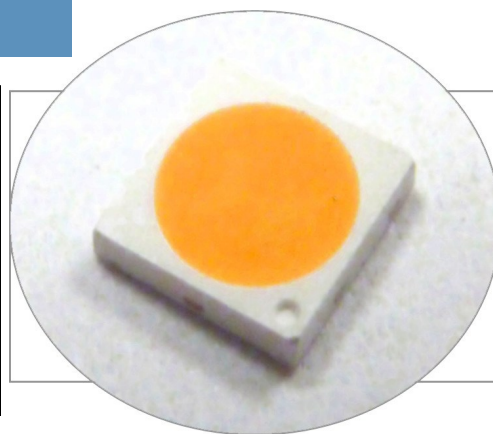


# SURFACE MOUNT LED WHITE, 3030 PACKAGE, 1.0W

# BIVAR

## SME3030UWD~~X~~10

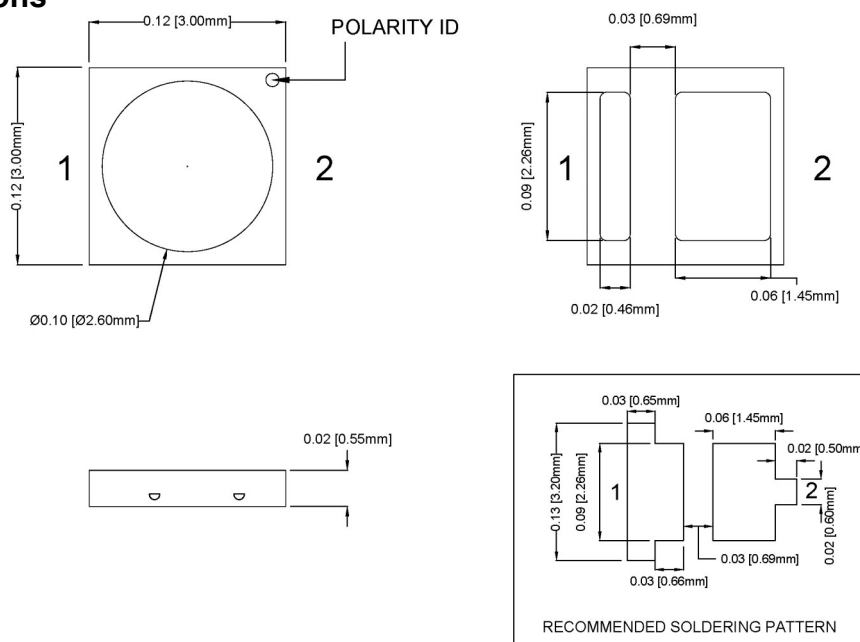
- ◆ Industry Standard 3030 Package
- ◆ RoHS Compliant
- ◆ Small Package and Footprint
- ◆ ~~X~~ - (~~C~~) Cool White, (~~N~~) Neutral White, (~~W~~) Warm White
- ◆ Wide Viewing Angle
- ◆ Ideal for Lighting and Backlighting Application



Bivar Surface Mount 3030 package LED may be used in nearly any lighting or backlighting application. The SME3030 Series is made with a special Epoxy Molding Compound that provides excellent heat resistance and is available in 3 color temperatures to meet any illumination needs: Cool, Neutral and Warm White. These 1 Watt SMD LED's have a minimum CRI Value of 80 and are conveniently packaged in standard tape and reels for pick and place assemblies.

| Part Number   | Material | Emitted Color | Lens Color | Luminous Flux (lm) TYP. | Viewing Angle |
|---------------|----------|---------------|------------|-------------------------|---------------|
| SME3030UWDC10 | InGaN    | Cool White    | Diffused   | 120                     | 110°          |
| SME3030UWDN10 | InGaN    | Neutral White | Diffused   | 117                     | 110°          |
| SME3030UWDW10 | InGaN    | Warm White    | Diffused   | 113                     | 110°          |

## Outline Dimensions



### Outline Drawings Notes:

1. All dimensions are in inches [millimeters].
2. Standard tolerance:  $\pm 0.010$  unless otherwise noted.



Bivar reserves the right to make changes at any time without notice.

# SURFACE MOUNT LED WHITE, 3030 PACKAGE, 1.0W



## Absolute Maximum Ratings

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

|                                         |              |
|-----------------------------------------|--------------|
| Power Dissipation                       | 1.630 W      |
| Forward Current ( DC )                  | 240 mA       |
| Peak Forward Current <sup>1</sup>       | 300 mA       |
| Reverse Voltage                         | 5 V          |
| Electrostatic Discharge (HBM)           | 1000 V       |
| Operating Temperature Range             | -40 ~ +85°C  |
| Storage Temperature Range               | -40 ~ +100°C |
| Junction Temperature                    | 115°C        |
| Lead Soldering Temperature <sup>2</sup> | 260°C        |

Notes: 1.  $\leq 10\%$  Duty Cycle, Pulse Width  $\leq 0.1$  msec.

2. Solder time less than 5 seconds at temperature extreme.

## Electrical / Optical Characteristics

$T_A = 25^\circ\text{C}$  &  $I_F = 150$  mA unless otherwise noted

| Part Number   | Forward Voltage (V) |     |     | Recommend Forward Current (mA) | Reverse Current ( $\mu\text{A}$ )<br>$V_R=5\text{V}$ | CCT (Kelvin) |      |      | Luminous Flux (lm) |     |     | Viewing Angle<br>$2\theta_{1/2}$<br>(deg) |
|---------------|---------------------|-----|-----|--------------------------------|------------------------------------------------------|--------------|------|------|--------------------|-----|-----|-------------------------------------------|
|               | MIN                 | TYP | MAX | TYP                            | MAX                                                  | MIN          | TYP  | MAX  | MIN                | TYP | MAX | TYP                                       |
| SME3030UWDC10 | 5.8                 | /   | 7.0 | 150                            | 10                                                   | 5310         | 5665 | 6020 | 90                 | 120 | 130 | 110                                       |
| SME3030UWDN10 | 5.8                 | /   | 7.0 | 150                            | 10                                                   | 3710         | 3985 | 4260 | 90                 | 117 | 130 | 110                                       |
| SME3030UWDW10 | 5.8                 | /   | 7.0 | 150                            | 10                                                   | 2870         | 3045 | 3220 | 90                 | 113 | 130 | 110                                       |

Notes: 1. The above forward voltage measurement allowance tolerance is  $\pm 0.1\text{V}$ .

2. The above luminous flux measurement allowance tolerance  $\pm 10\%$ .

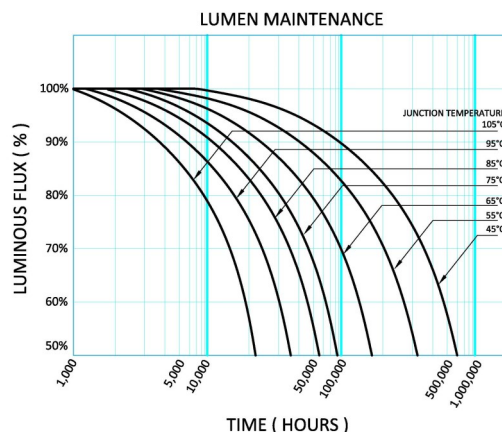
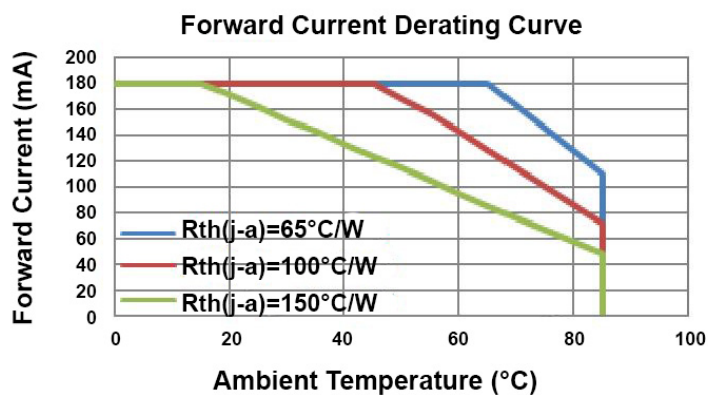
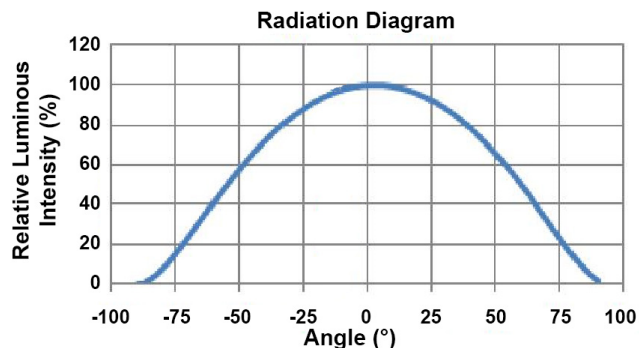
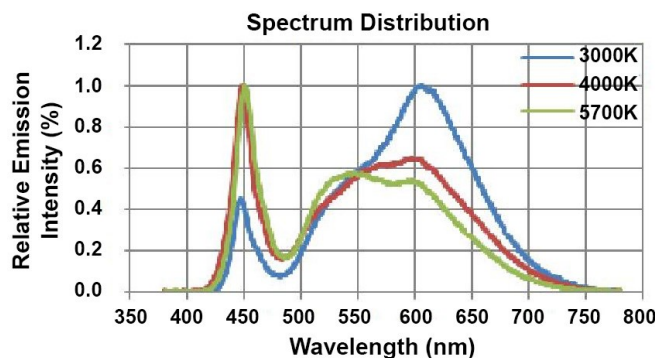
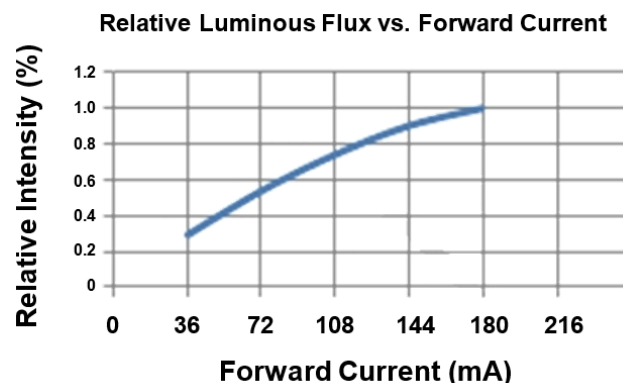
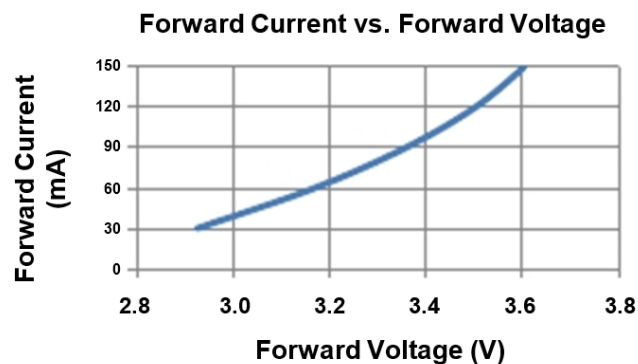
Bivar reserves the right to make changes at any time without notice.

# SURFACE MOUNT LED WHITE, 3030 PACKAGE, 1.0W



## Typical Electrical / Optical Characteristics

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

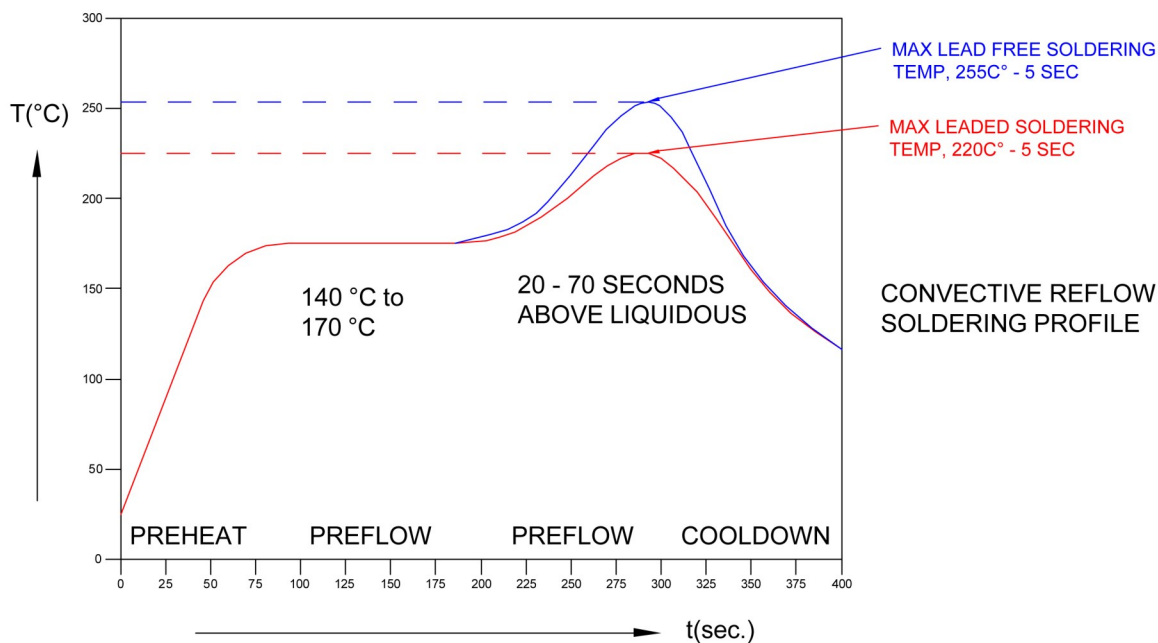


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# SURFACE MOUNT LED WHITE, 3030 PACKAGE, 1.0W



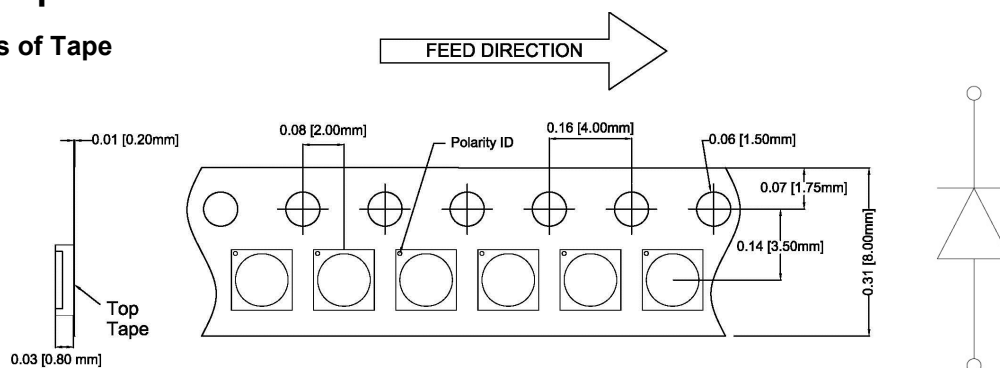
## Recommended Soldering Conditions



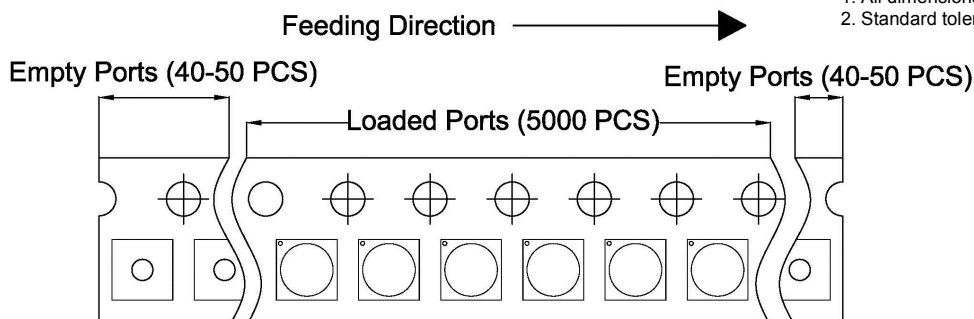
## Tape and Reel Dimensions

Note: 5000 pcs/Reel

### • Dimensions of Tape



### • Arrangement of Tape

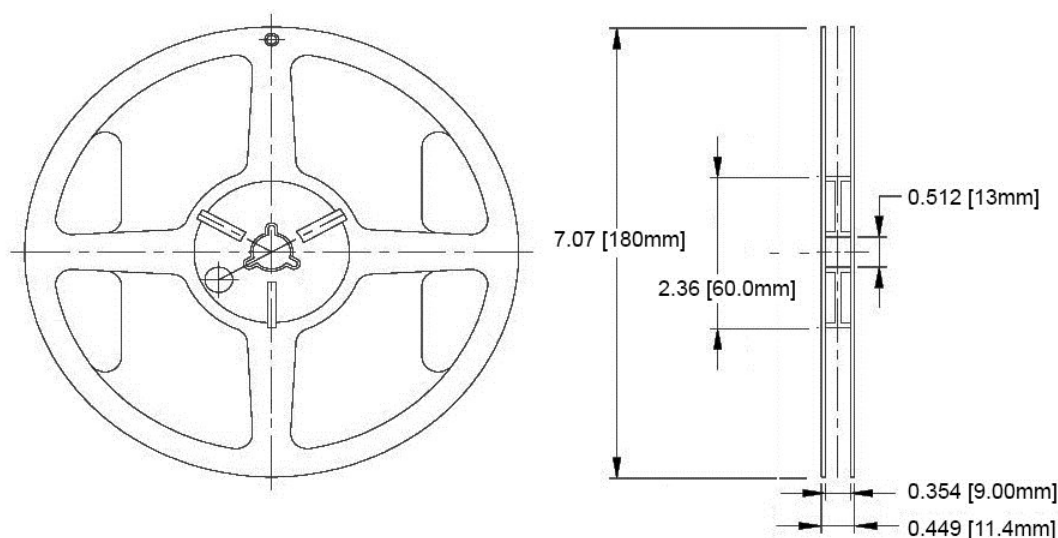


#### Outline Drawings Notes:

1. All dimensions are in inches [millimeters].
2. Standard tolerance:  $\pm 0.010$ " unless otherwise noted.

Bivar reserves the right to make changes at any time without notice.

# SURFACE MOUNT LED WHITE, 3030 PACKAGE, 1.0W



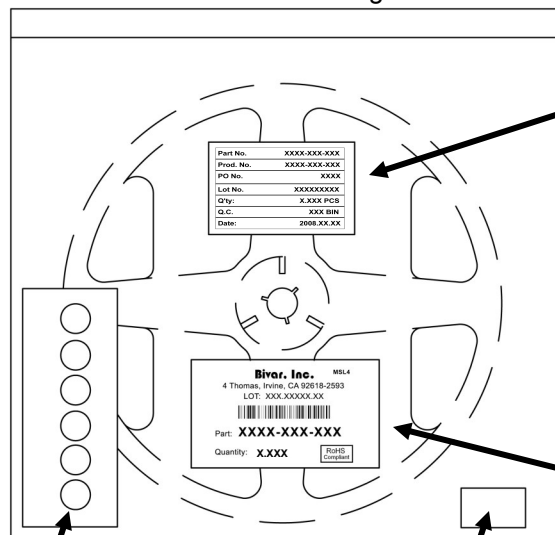
## Outline Drawings Notes:

1. All dimensions are in inches [millimeters].
2. Standard tolerance unless otherwise noted: X.XXX  $\pm$  0.010"  
X.X  $\pm$  0.1"

## Packaging and Labeling Plan

Note: 1 Reel / Bag

Vacuum and Heat Sealed  
ESD/MBB Bag



Humidity Indicator Card

Desiccants

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

Internal Quality Control



Bivar Standard Packaging Label

Bivar reserves the right to make changes at any time without notice.