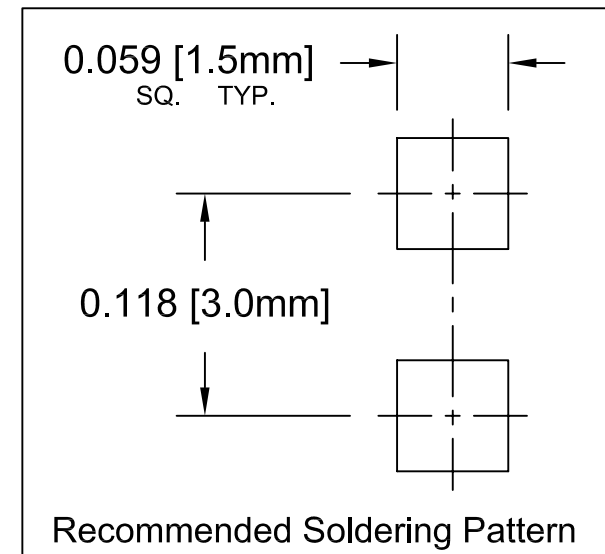
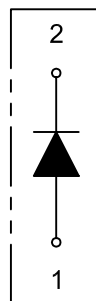
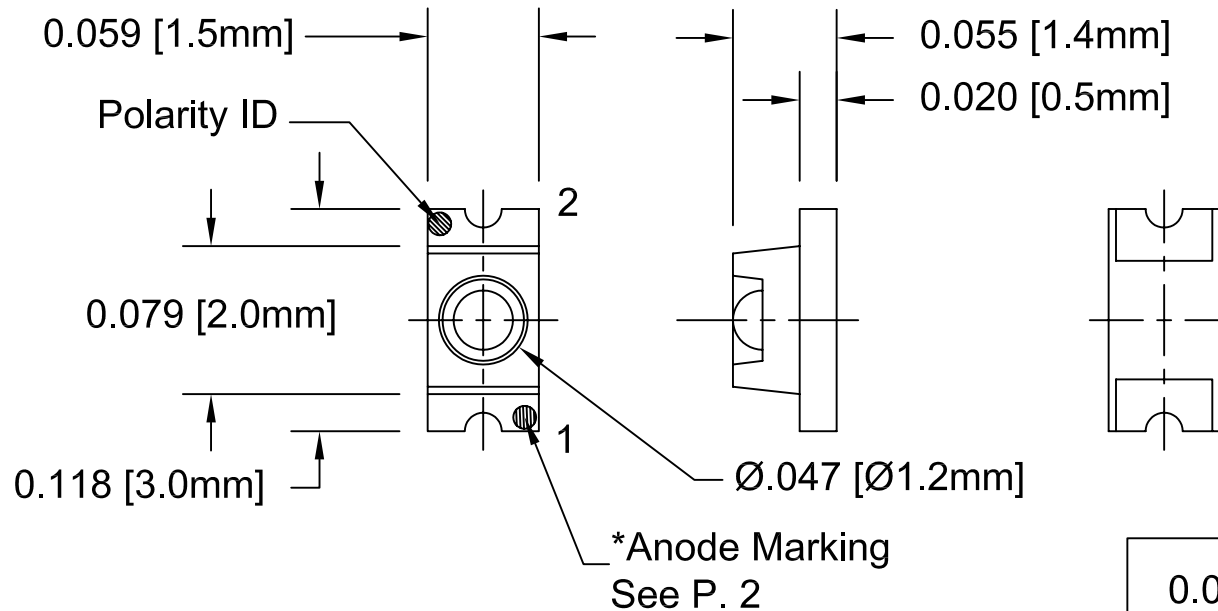


| REV. | DESCRIPTION                              | DATE     | APPROVED |
|------|------------------------------------------|----------|----------|
| C    | Engineering Update w/o Changes           | 03/10/04 | M. C.    |
| D    | Image Orientation Update w/o Changes     | 02/24/05 | M. C.    |
| E    | TYPO Correction for SM1206BWC-IL / P.2   | 04/19/05 | M. C.    |
| F    | Update Anode Marking for SM1206HC/SRC-IL | 05/22/08 | M. C.    |





### ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

|                                             |       |                     |
|---------------------------------------------|-------|---------------------|
| REVERSE VOLTAGE                             | _____ | 5V                  |
| REVERSE CURRENT                             | _____ | 100uA               |
| OPERATING TEMPERATURE RANGE                 | _____ | -25°C - 85°C        |
| STORAGE TEMPERATURE                         | _____ | -30°C - 100°C       |
| LEAD SOLDERING TEMPERATURE(1/16" FROM BODY) | _____ | 260°C FOR 5 SECONDS |

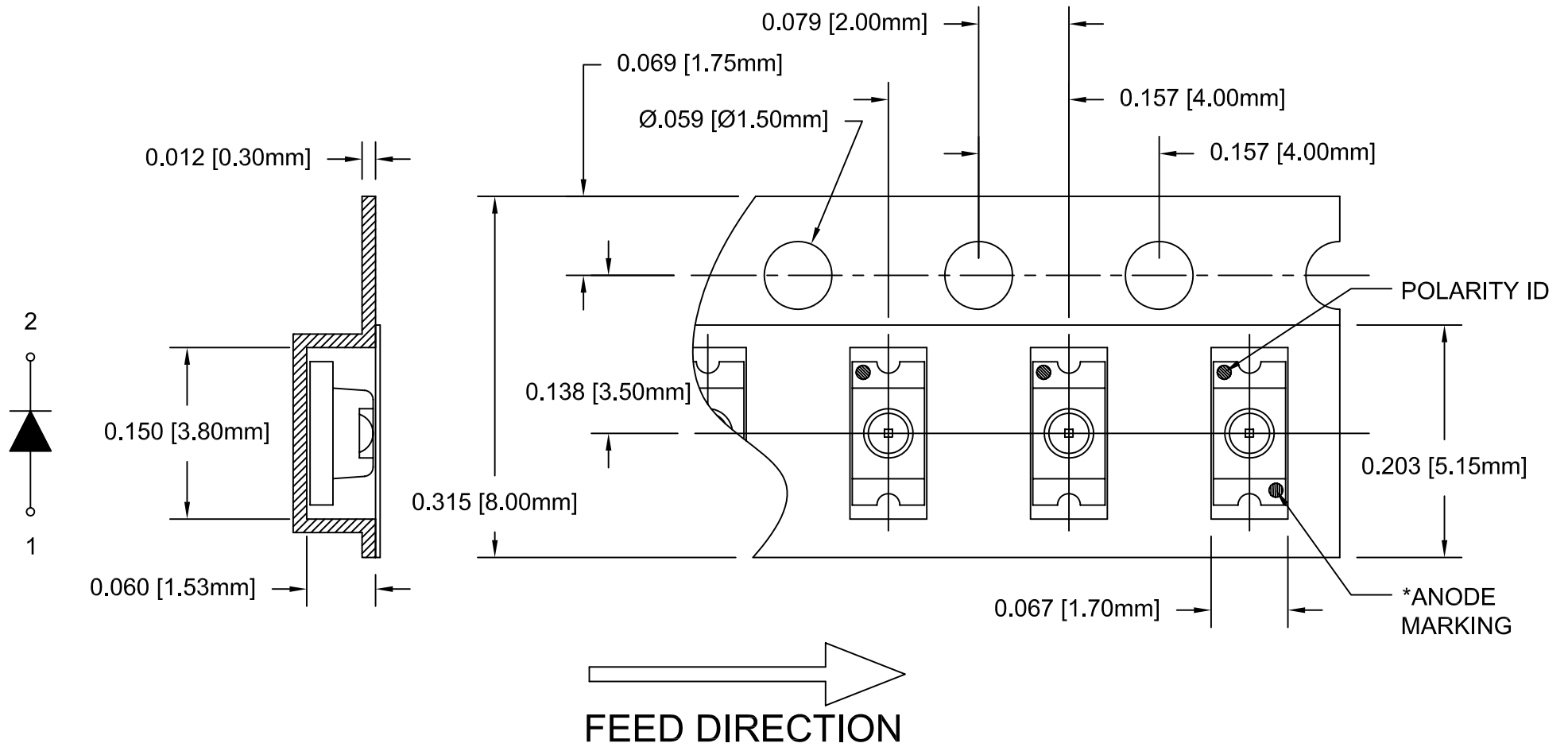
|                                                    |         |                                                                                                     |  |
|----------------------------------------------------|---------|-----------------------------------------------------------------------------------------------------|--|
| STANDARD TOLERANCE<br>(UNLESS OTHERWISE SPECIFIED) |         | <b>BIVAR</b> <sup>®</sup><br>4 THOMAS, IRVINE, CA. 92618<br>TEL: (949) 951-8808 FAX: (949) 951-3974 |  |
| DECIMALS                                           | ANGULAR |                                                                                                     |  |
| .X ±.1                                             | X° ± 1° | TITLE: SURFACE MOUNT LED,<br>1206 PACKAGE                                                           |  |
| .XX ±.02                                           |         |                                                                                                     |  |
| .XXX ±.010                                         |         | PART NO:<br>SM1206XX-IL                                                                             |  |
| DESIGNED:<br><b>David Green</b>                    |         |                                                                                                     |  |
|                                                    |         | CHECKED:<br><b>M. Chen</b>                                                                          |  |
| CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.    |         |                                                                                                     |  |

| REV. | DESCRIPTION  | DATE | APPROVED |
|------|--------------|------|----------|
|      | SEE SHEET#1. |      |          |
|      |              |      |          |


| LED Part No.   | Chip          |                            |               | Lens Appearance | Absolute Max. Ratings |            |            |             | Electro-Optical Data @ 20ma |     |             | Viewing Angle<br>2θ ½<br>(Deg) |
|----------------|---------------|----------------------------|---------------|-----------------|-----------------------|------------|------------|-------------|-----------------------------|-----|-------------|--------------------------------|
|                | Material      | Peak Wave Length<br>λp(nm) | Emitted Color |                 | Δλ<br>(nm)            | Pd<br>(mW) | If<br>(mA) | Peak If(mA) | Vf<br>(V)                   |     | Iv<br>(mcd) |                                |
|                |               |                            |               |                 |                       |            |            |             | TYP                         | MAX | TYP         |                                |
| SM1206BWC-IL   | InGaNSiC      | 460                        | BLUE          | WATER CLEAR     | 65                    | 150        | 30         | 150         | 3.4                         | 3.8 | 80          | 30                             |
| SM1206PGC-IL   | GaP/GaP       | 555                        | PURE GREEN    | WATER CLEAR     | 25                    | 100        | 30         | 150         | 2.2                         | 2.6 | 3           | 30                             |
| SM1206GC-IL    | GaP/GaP       | 568                        | GREEN         | WATER CLEAR     | 30                    | 100        | 30         | 150         | 2.2                         | 2.6 | 18          | 30                             |
| SM1206YC-IL    | GaAsP/GaP     | 585                        | YELLOW        | WATER CLEAR     | 35                    | 100        | 30         | 150         | 2.1                         | 2.6 | 25          | 30                             |
| SM1206UYC-IL   | AlGaInP       | 588                        | ULTRA YELLOW  | WATER CLEAR     | 15                    | 100        | 30         | 150         | 2.0                         | 2.6 | 110         | 30                             |
| SM1206AC-IL    | GaAsP/GaP     | 610                        | AMBER         | WATER CLEAR     | 35                    | 100        | 30         | 150         | 2.0                         | 2.6 | 30          | 30                             |
| SM1206UOC-IL   | AlGaInP       | 620                        | ULTRA ORANGE  | WATER CLEAR     | 17                    | 100        | 30         | 150         | 2.0                         | 2.6 | 110         | 30                             |
| SM1206HC-IL*   | GaAsP/GaP     | 635                        | HE RED        | WATER CLEAR     | 45                    | 100        | 30         | 150         | 2.0                         | 2.6 | 25          | 30                             |
| SM1206URC-IL   | GaAlAs/GaAlAs | 660                        | ULTRA RED     | WATER CLEAR     | 20                    | 80         | 30         | 150         | 2.0                         | 2.6 | 60          | 30                             |
| SM1206SRC-IL*  | GaAlAs/GaAs   | 660                        | SUPER RED     | WATER CLEAR     | 20                    | 60         | 30         | 150         | 1.7                         | 2.6 | 50          | 30                             |
| SM1206RC-IL    | GaP/GaP       | 700                        | RED           | WATER CLEAR     | 90                    | 50         | 15         | 50          | 2.2                         | 2.6 | 6           | 30                             |
| SM1206UWC-IL   | GaInN         | X=.29 Y=.30                | WHITE         | WATER CLEAR     | --                    | 125        | 30         | 150         | 3.4                         | 4.0 | 180         | 30                             |
| *ANODE MARKING |               |                            |               |                 |                       |            |            |             |                             |     |             |                                |

|                                                                                       |  |                                                                                                                                                                                   |                                                |
|---------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| STANDARD TOLERANCE<br>( UNLESS OTHERWISE SPECIFIED )<br>±10% ALL VALUES               |  | <br><b>BIVAR</b> ®<br>4 THOMAS, IRVINE, CA. 92618<br>TEL: (949) 951-8808 FAX: (949) 951-3974 |                                                |
| ANGULAR<br>X° ± 5°                                                                    |  |                                                                                                                                                                                   |                                                |
|  |  | TITLE: SURFACE MOUNT LED,<br>1206 PACKAGE                                                                                                                                         |                                                |
|                                                                                       |  | DESIGNED:<br><b>David Green</b>                                                                                                                                                   | DATE:<br><b>03/07/03</b>                       |
| CHECKED:<br><b>M. Chen</b>                                                            |  | DATE:<br><b>03/07/03</b>                                                                                                                                                          | CAGE CODE : <b>32559</b> SHEET # <b>2 OF 3</b> |
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| REV. | DESCRIPTION  | DATE | APPROVED |
|------|--------------|------|----------|
|      | SEE SHEET#1. |      |          |



2. UNLESS OTHERWISE SPECIFIED,  
PACKAGING TO COMPLY WITH EIA-481-B  
1. 3000 pcs PER REEL

|                                                                       |                          |                                                                                                                                                                 |                       |
|-----------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| STANDARD TOLERANCE<br>(UNLESS OTHERWISE SPECIFIED)<br>±10% ALL VALUES |                          | <br>4 THOMAS, IRVINE, CA. 92618<br>TEL: (949) 951-8808 FAX: (949) 951-3974 |                       |
| ANGULAR<br>X° ± 5°                                                    |                          | TITLE: SURFACE MOUNT LED,<br>1206 PACKAGE                                                                                                                       |                       |
| DESIGNED:<br><b>David Green</b>                                       | DATE:<br><b>03/07/03</b> | PART NO:<br><b>SM1206 PACKAGE</b>                                                                                                                               | REVISION:<br><b>F</b> |
| CHECKED:<br><b>M. Chen</b>                                            | DATE:<br><b>03/07/03</b> | CAGE CODE : <b>32559</b>                                                                                                                                        | SHEET # <b>3 OF 3</b> |
| CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.                       |                          |                                                                                                                                                                 |                       |