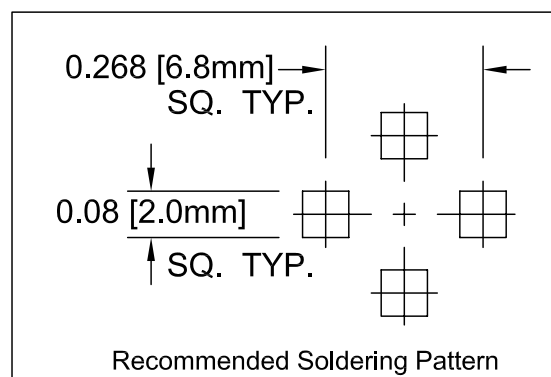
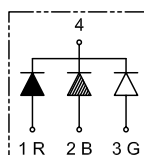
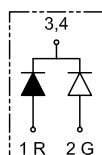
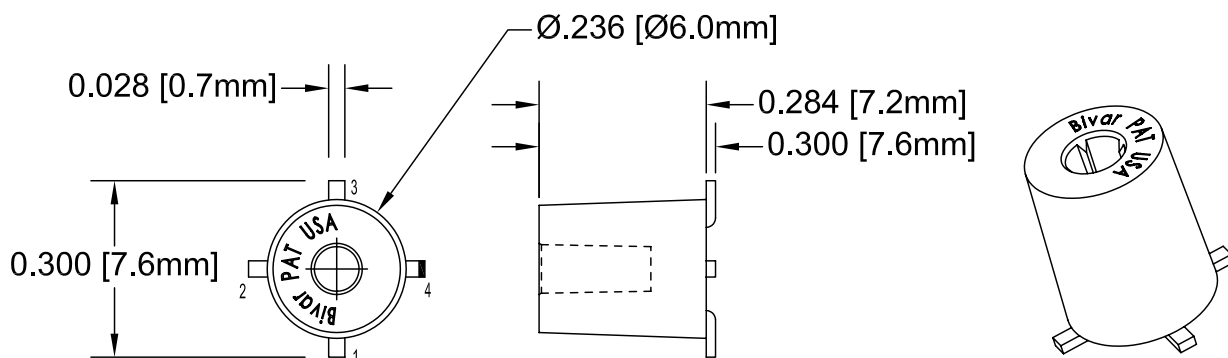


| REV. | DESCRIPTION                                            | DATE     | APPROVED |
|------|--------------------------------------------------------|----------|----------|
| H    | Typo Correction Page 3,<br>"500" to "800" pcs Per Reel | 03/10/04 | M. C.    |
| J    | Changed "800" pcs Per Reel to "700", Page 3            | 12/01/04 | M. C.    |
| K    | Removed Low Current SMPTs                              | 10/17/06 | M. C.    |
| L    | Removed LeadFrame Hidden Lines                         | 03/12/08 | 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 |

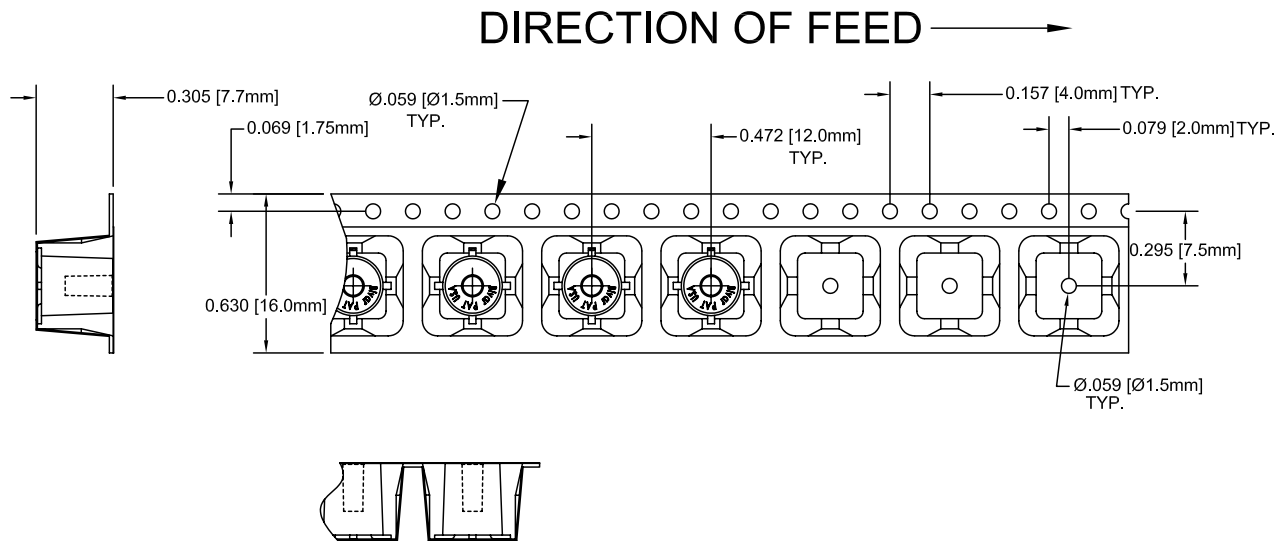
|                                                      |                          |                                                                                                                                                                 |                       |
|------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| STANDARD TOLERANCE<br>( UNLESS OTHERWISE SPECIFIED ) |                          | <br>4 THOMAS, IRVINE, CA. 92618<br>TEL: (949) 951-8808 FAX: (949) 951-3974 |                       |
| DECIMALS                                             | ANGULAR                  |                                                                                                                                                                 |                       |
| .X ± .1                                              | X° ± 1°                  |  <b>TITLE: SURFACE MOUNT LED,<br/>PT SERIES</b>                            |                       |
| .XX ± .02                                            |                          |                                                                                                                                                                 |                       |
| .XXX ± .010                                          |                          | REVISION: L                                                                                                                                                     |                       |
| DESIGNED:<br><b>Michael Chen</b>                     | DATE:<br><b>07/08/02</b> | <b>PART NO: SMPT-XX</b>                                                                                                                                         |                       |
| CHECKED:<br><b>D. Green</b>                          | DATE:<br><b>06/24/03</b> | <b>CAGE CODE : 32559</b>                                                                                                                                        | <b>SHEET # 1 OF 3</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 @ 20m A |     |           | Viewing Angle 2 Θ ½ (Deg) |
|--------------|----------|-------------------------|----------------|-----------------|-----------------------|----------|----------|--------------|------------------------------|-----|-----------|---------------------------|
|              | Material | Peak Wave Length λp(nm) | Em itted Color |                 | Δλ (nm)               | Pd (m W) | If (m A) | Peak If(m A) | Vf (V)                       |     | Iv (m cd) |                           |
|              |          |                         |                |                 |                       |          |          |              | TYP                          | MAX | TYP       |                           |
|              |          |                         |                |                 |                       |          |          |              |                              |     |           |                           |
| SMPT-UBWC    | GaN      | 470                     | BLUE           | OPTICAL         | 68                    | 150      | 30       | 150          | 3.4                          | 4.0 | 288.0     | DIRECT                    |
| SMPT-UGC     | InGaN    | 525                     | GREEN          | OPTICAL         | 40                    | 150      | 30       | 150          | 3.2                          | 3.8 | 460.0     | DIRECT                    |
| SMPT-UYC     | AlGaInP  | 595                     | YELLOW         | OPTICAL         | 32                    | 100      | 30       | 150          | 2.0                          | 2.5 | 456.0     | DIRECT                    |
| SMPT-URC     | AlGaInP  | 640                     | HE RED         | OPTICAL         | 23                    | 80       | 30       | 150          | 1.9                          | 2.4 | 416.0     | DIRECT                    |
| SMPT-UWC     | GaN      | -                       | WHITE          | OPTICAL         | 68                    | 150      | 30       | 150          | 3.4                          | 4.0 | 250.0     | DIRECT                    |
| SMPT-SBC     | GaN      | 640                     | HE RED         | OPTICAL         | 23                    | 80       | 30       | 150          | 1.9                          | 2.4 | 416.0     | DIRECT                    |
|              | GaN      | 525                     | GREEN          | OPTICAL         | 40                    | 150      | 30       | 150          | 3.2                          | 3.8 | 460.0     | DIRECT                    |
| SMPT-RGB     | AlGaInP  | 640                     | HE RED         | OPTICAL         | 23                    | 80       | 30       | 150          | 1.9                          | 2.4 | 416.0     | DIRECT                    |
|              | GaN      | 470                     | BLUE           | OPTICAL         | 68                    | 150      | 30       | 150          | 3.4                          | 4.0 | 288.0     | DIRECT                    |
|              | InGaN    | 525                     | GREEN          | OPTICAL         | 40                    | 150      | 30       | 150          | 3.2                          | 3.8 | 460.0     | DIRECT                    |

|                                                                                                                        |                          |                                                                                                                                                                    |                       |
|------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| STANDARD TOLERANCE<br>( UNLESS OTHERWISE SPECIFIED )<br><u>±10% ALL VALUES</u> <u>ANGULAR</u><br>$X^\circ \pm 5^\circ$ |                          | <br>4 THOMAS, IRVINE, CA, 92618<br>TEL: (949) 951-8808    FAX: (949) 951-3974 |                       |
|                                                                                                                        |                          |  <b>TITLE:</b> SURFACE MOUNT LED,<br>SMPT SERIES                              |                       |
| DESIGNED:<br><b>David Green</b>                                                                                        | DATE:<br><b>07/08/02</b> | <b>PART NO:</b> SMPT-XX                                                                                                                                            |                       |
| CHECKED:<br><b>M. Chen</b>                                                                                             | DATE:<br><b>06/24/03</b> | <b>CAGE CODE :</b> 32559                                                                                                                                           | <b>SHEET #</b> 2 OF 3 |
| CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.                                                                        |                          |                                                                                                                                                                    |                       |

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



#### NOTES:

5. EMPTY COMPONENT POCKETS ARE SEALED WITH TOP COVER TAPE.
4. MINIMUM LEADER LENGTH AT BOTH ENDS OF TAPE IS 17.7 [450.0MM].
3. THE MAXIMUM NUMBER OF EMPTY POCKETS IS TWO.
2. THE MARKED COMMON LEAD#4 IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE IN ACCORDANCE WITH EIA-481 SPECIFICATIONS.
1. 700 pcs PER REEL

|                                                      |                          |                                                                                                     |                              |
|------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------|------------------------------|
| 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°                  | <b>TITLE:</b> SURFACE MOUNT LED,<br>SMPT SERIES                                                     |                              |
| .XX ± .02                                            |                          |                                                                                                     |                              |
| .XXX ± .010                                          |                          | <b>PART NO:</b> SMPT-XX                                                                             |                              |
| DESIGNED:<br><b>Michael Chen</b>                     | DATE:<br><b>07/08/02</b> |                                                                                                     |                              |
| CHECKED:<br><b>D. Green</b>                          | DATE:<br><b>06/24/03</b> | <b>CAGE CODE :</b> 32559                                                                            | <b>SHEET #</b> 3 <b>OF</b> 3 |
| CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.      |                          |                                                                                                     |                              |