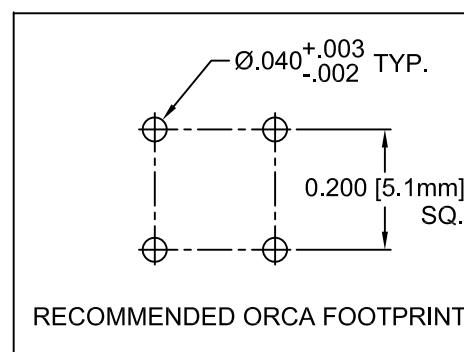
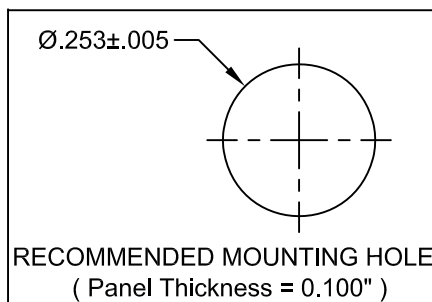
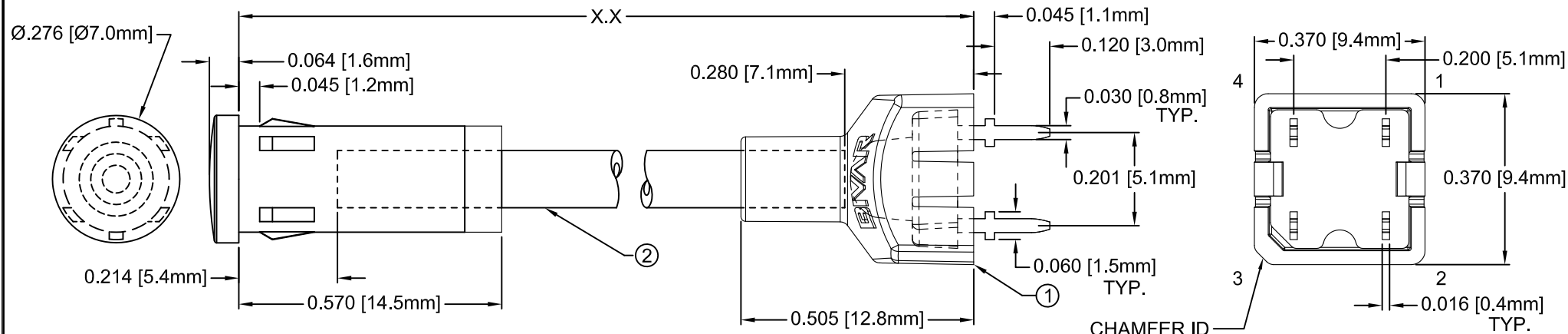


| ITEM | Q'TY | PART NUMBER | PART DESCRIPTION                                 |
|------|------|-------------|--------------------------------------------------|
| 1    | 1    | ORFLP2-XXX  | 2mm Flexible Light Pipe ORCA Adapter w/ LED      |
| 2    | 1    | FLP25-XX.X  | Flexible Light Pipe Lens Cap Assembly, 7mm Round |

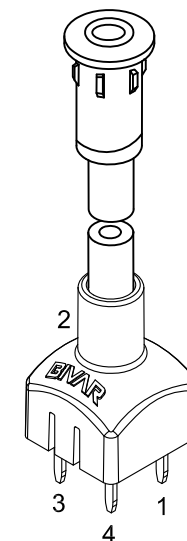
| REV. | DESCRIPTION                    | DATE     | APPROVED |
|------|--------------------------------|----------|----------|
| A    | Engineering Release.           | 09/14/09 | T. Y.    |
| B    | Updated Table For Length "X.X" | 11/14/12 | T. Y.    |
|      |                                |          |          |
|      |                                |          |          |



| "X.X" *          | Tolerance |
|------------------|-----------|
| 1.1" ~ 16.0"     | ±0.050"   |
| 16.1" ~ 40.0"    | ±0.15"    |
| 40.1" ~ 80.0"    | ±0.30"    |
| 80.1" ~ 3,940.0" | ±0.5%     |

\* Available in 0.1" increments only

NOTE: ORFLP2-XXX ADAPTER SHIPPED SEPARATELY



SEE PAGE 2 FOR POLARITY

## ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

|                                              |                     |
|----------------------------------------------|---------------------|
| REVERSE VOLTAGE                              | 5V                  |
| REVERSE CURRENT                              | 10uA                |
| OPERATING TEMPERATURE RANGE                  | -25°C ~ +80°C       |
| STORAGE TEMPERATURE                          | -30°C ~ +80°C       |
| LEAD SOLDERING TEMPERATURE (1/16" FROM BODY) | 260°C FOR 5 SECONDS |

|                                                      |                          |                                                                                       |                       |
|------------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------|-----------------------|
| STANDARD TOLERANCE<br>( UNLESS OTHERWISE SPECIFIED ) |                          | <b>BIVAR</b> <sup>®</sup>                                                             |                       |
| <u>DECIMALS</u>                                      | <u>ANGULAR</u>           | 4 THOMAS, IRVINE, CA. 92618<br>TEL: (949) 951-8808 FAX: (949) 951-3974                |                       |
| .X ±.2                                               | X° ± 1°                  |  |                       |
| .XX ±.02                                             |                          |                                                                                       |                       |
| .XXX ±.010                                           |                          | <b>TITLE:</b> 2mm FLP ORCA ASSEMBLY,<br>7mm ROUND LENS CAP                            |                       |
| DESIGNED:<br><b>Raffy Paje</b>                       | DATE:<br><b>09/14/09</b> | <b>PART NO:</b><br>R25-X.X-XXX                                                        | REVISION<br><b>B</b>  |
| CHECKED:<br><b>F. Jensen</b>                         | DATE:<br><b>09/14/09</b> | <b>CAGE CODE :</b> 32559                                                              | <b>SHEET # 1 OF 2</b> |
| CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.      |                          |                                                                                       |                       |

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

| Assy P/N                           | LED P/N       | Emitted Color | Dominant Length<br>λd(nm) /<br>CCT (K) | Lens Appearance | Absolute Max. Ratings |                 |     | Vf<br>(V) |     |     | Iv<br>(mcd) |      | Viewing Angle<br>2 θ½<br>(Deg) | POLARITY<br>DIAGRAM |
|------------------------------------|---------------|---------------|----------------------------------------|-----------------|-----------------------|-----------------|-----|-----------|-----|-----|-------------|------|--------------------------------|---------------------|
|                                    |               |               | Pd<br>(mW)                             |                 | If<br>(mA)            | Peak If<br>(mA) |     |           |     |     |             |      |                                |                     |
|                                    |               |               | MIN - MAX                              |                 | MIN                   | TYP             | MAX | MIN       | TYP |     |             |      |                                |                     |
| SINGLE COLOR LED ASSEMBLIES (20mA) |               |               |                                        |                 |                       |                 |     |           |     |     |             |      |                                |                     |
| R25-X.X-BLU                        | R20BLU-4-0045 | BLUE          | 465 -475                               | WATER CLEAR     | 220                   | 50              | 100 | 3.0       | 3.4 | 3.8 | 1000        | 1500 | 45                             | FIG. A              |
| R25-X.X-GRN                        | R20GRN-4-0045 | GREEN         | 516 - 526                              |                 | 220                   | 50              | 100 | 3.0       | 3.4 | 3.8 | 6000        | 8000 | 45                             | FIG. A              |
| R25-X.X-WHT                        | R20WHT-4-0045 | WHITE         | 6000K                                  |                 | 220                   | 50              | 100 | 3.0       | 3.4 | 3.8 | 6000        | 8000 | 45                             | FIG. A              |
| SINGLE COLOR LED ASSEMBLIES (50mA) |               |               |                                        |                 |                       |                 |     |           |     |     |             |      |                                |                     |
| R25-X.X-RED                        | R50RED-4-0045 | RED           | 620 - 635                              | WATER CLEAR     | 140                   | 80              | 160 | 2.0       | 2.4 | 2.8 | 5000        | 6000 | 45                             | FIG. A              |
| R25-X.X-YLW                        | R50YLW-4-0045 | YELLOW        | 588 - 594                              |                 | 140                   | 80              | 160 | 2.0       | 2.4 | 2.8 | 5000        | 6000 | 45                             | FIG. A              |
| BI-COLOR LED ASSEMBLIES (50mA)     |               |               |                                        |                 |                       |                 |     |           |     |     |             |      |                                |                     |
| R25-X.X-RG                         | R50RG2-4-0045 | RED           | 620 - 635                              | WATER CLEAR     | 150                   | 80              | 160 | 2.2       | 2.6 | 3.0 | 3000        | 4000 | 45                             | FIG. B              |
|                                    |               | GREEN         | 515 - 525                              |                 | 220                   | 80              | 150 | 3.4       | 3.8 | 4.4 | 4000        | 5000 |                                |                     |
| R25-X.X-RB                         | R50RB2-4-0045 | RED           | 620 - 635                              | WATER CLEAR     | 150                   | 80              | 160 | 2.2       | 2.6 | 3.0 | 3000        | 4000 | 45                             | FIG. C              |
|                                    |               | BLUE          | 460 - 470                              |                 | 220                   | 80              | 150 | 3.4       | 3.8 | 4.4 | 200         | 400  |                                |                     |
| R25-X.X-BG                         | R50BG2-4-0045 | BLUE          | 460 - 470                              | WATER CLEAR     | 220                   | 80              | 150 | 3.4       | 3.8 | 4.4 | 200         | 400  | 45                             | FIG. D              |
|                                    |               | GREEN         | 515 - 525                              |                 | 220                   | 80              | 150 | 3.4       | 3.8 | 4.4 | 4000        | 5000 |                                |                     |
| R25-X.X-RGB                        | R50RGB-4-0045 | RED           | 620 - 635                              | WATER CLEAR     | 150                   | 80              | 160 | 2.2       | 2.6 | 3.0 | 3000        | 4000 | 45                             | FIG. E              |
|                                    |               | GREEN         | 515 - 525                              |                 | 220                   | 80              | 150 | 3.4       | 3.8 | 4.4 | 4000        | 5000 |                                |                     |
|                                    |               | BLUE          | 460 - 470                              |                 | 220                   | 80              | 150 | 3.4       | 3.8 | 4.4 | 200         | 400  |                                |                     |

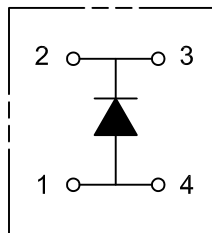


FIG. A

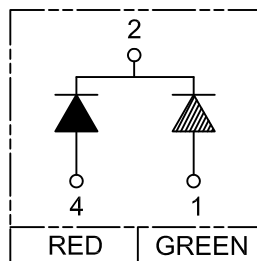


FIG. B

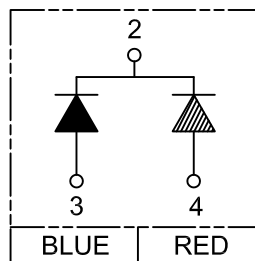


FIG. C

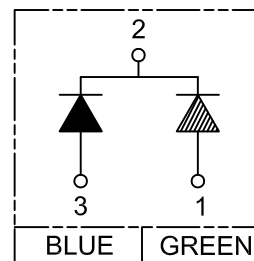


FIG. D

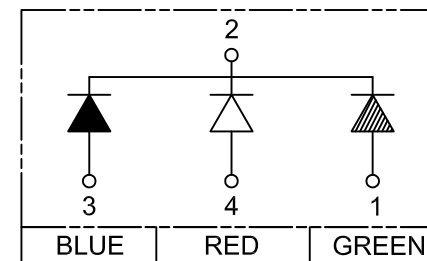


FIG. E

## NOTES:

1. INDIVIDUAL LED P/N DATA AVAILABLE @ WWW.BIVAR.COM.

|                                                      |                          |                                                                                                                                                                                              |                       |
|------------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| STANDARD TOLERANCE<br>( UNLESS OTHERWISE SPECIFIED ) |                          | <br><b>BIVAR</b> <sup>®</sup><br>4 THOMAS, IRVINE, CA. 92618<br>TEL: (949) 951-8808 FAX: (949) 951-3974 |                       |
| DECIMALS                                             | ANGULAR                  |                                                                                                                                                                                              |                       |
| DESIGNED:<br><b>Raffy Paje</b>                       | DATE:<br><b>09/14/09</b> | TITLE: 2mm FLP ORCA ASSEMBLY,<br>7mm ROUND LENS CAP                                                                                                                                          |                       |
| CHECKED:<br><b>F. Jensen</b>                         | DATE:<br><b>09/14/09</b> | PART NO:<br><b>R25-X.X-XXX</b>                                                                                                                                                               | REVISION:<br><b>B</b> |
|                                                      |                          | CAGE CODE : 32559                                                                                                                                                                            | SHEET # 2 OF 2        |
| CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.      |                          |                                                                                                                                                                                              |                       |