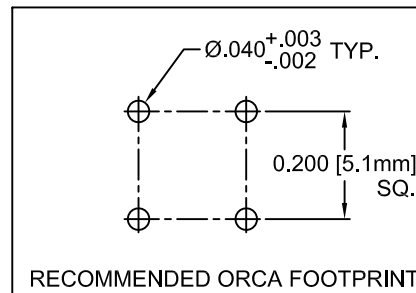
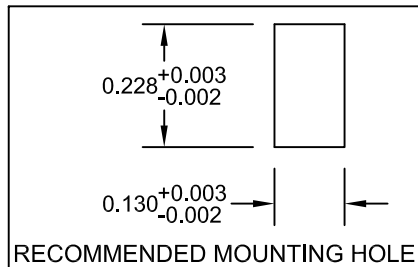
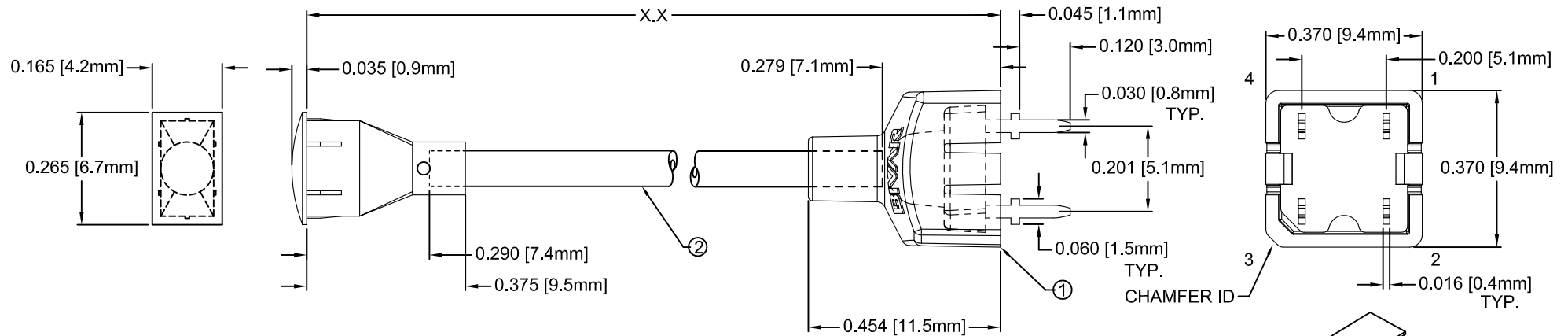


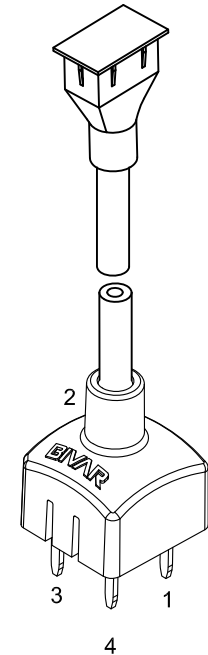
| ITEM | Q'TY | PART NUMBER | PART DESCRIPTION                                   |
|------|------|-------------|----------------------------------------------------|
| 1    | 1    | ORFLP1-XXX  | 1mm Flexible Light Pipe ORCA Adapter w/ LED        |
| 2    | 1    | FLPR1-XX.X  | Flexible Light Pipe Lens Cap Assembly, Rectangular |

| REV. | DESCRIPTION          | DATE     | APPROVED |
|------|----------------------|----------|----------|
| A    | Engineering Release. | 07/07/09 | T. Y.    |
|      |                      |          |          |
|      |                      |          |          |
|      |                      |          |          |



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

NOTE: ORFLP1-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 ) |                          | <div></div> <div>4 THOMAS, IRVINE, CA. 92618</div> <div>TEL: (949) 951-8808    FAX: (949) 951-3974</div> |                       |
| <u>DECIMALS</u>                                      | <u>ANGULAR</u>           |                                                                                                                                                                                               |                       |
| .X     ± .2                                          | X°   ± 1°                |                                                                                                                                                                                               |                       |
| .XX   ± .02                                          |                          |                                                                                                                                                                                               |                       |
| .XXX ± .010                                          |                          |                                                                                                                                                                                               |                       |
|                                                      |                          | <div></div>                                                                                              |                       |
|                                                      |                          | TITLE: 1mm FLP ORCA ASSEMBLY,<br>RECTANGULAR LENS CAP                                                                                                                                         |                       |
| DESIGNED:<br><b>Raffy Paje</b>                       | DATE:<br><b>07/07/09</b> | PART NO:<br><b>R1R-X.X-XXX</b>                                                                                                                                                                | REVISION:<br><b>A</b> |
| CHECKED:<br><b>F. Jensen</b>                         | DATE:<br><b>07/07/09</b> | CAGE CODE : <b>32559</b>                                                                                                                                                                      | SHEET # 1 OF 2        |
| 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) / CCT (K) | Lens Appearance | Absolute Max. Ratings |              |     | Vf (V) |     |     | Iv (mcd) |      | Viewing Angle<br>2 θ½ (Deg) | POLARITY DIAGRAM |
|------------------------------------|---------------|---------------|-------------------------------------|-----------------|-----------------------|--------------|-----|--------|-----|-----|----------|------|-----------------------------|------------------|
|                                    |               |               | Pd (mW)                             |                 | If (mA)               | Peak If (mA) |     |        |     |     |          |      |                             |                  |
|                                    |               |               | MIN - MAX                           |                 | MIN                   | TYP          | MAX | MIN    | TYP |     |          |      |                             |                  |
| SINGLE COLOR LED ASSEMBLIES (20mA) |               |               |                                     |                 |                       |              |     |        |     |     |          |      |                             |                  |
| R1R-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           |
| R1R-X.X-GRN                        | R20GRN-4-0045 | GREEN         | 516 - 526                           |                 | 220                   | 50           | 100 | 3.0    | 3.4 | 3.8 | 6000     | 8000 | 45                          | FIG. A           |
| R1R-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) |               |               |                                     |                 |                       |              |     |        |     |     |          |      |                             |                  |
| R1R-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           |
| R1R-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)     |               |               |                                     |                 |                       |              |     |        |     |     |          |      |                             |                  |
| R1R-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 |                             |                  |
| R1R-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  |                             |                  |
| R1R-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 |                             |                  |
| R1R-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  |                             |                  |

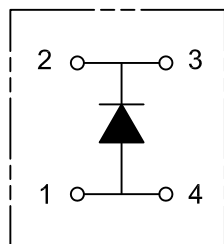


FIG. A

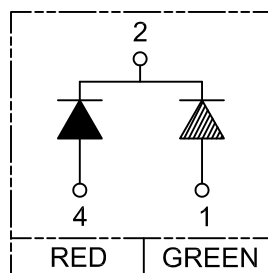


FIG. B

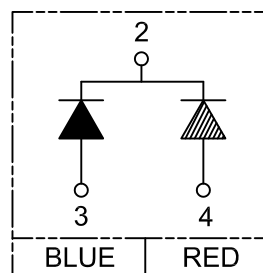


FIG. C

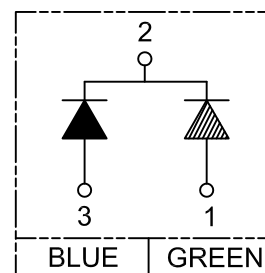


FIG. D

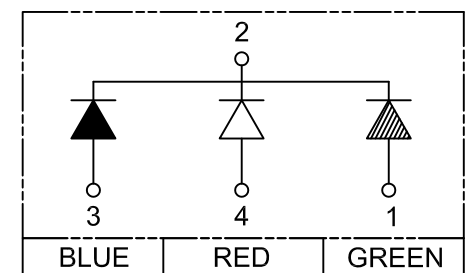
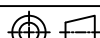


FIG. E

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

|                                                      |                          |                                                                                                                                                                 |                       |
|------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
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| <u>DECIMALS</u>                                      |                          |                                                                                                                                                                 |                       |
| <u>ANGULAR</u>                                       |                          |                                                                            |                       |
|                                                      |                          |                                                                                                                                                                 |                       |
| DESIGNED:<br><b>Raffy Paje</b>                       | DATE:<br><b>07/07/09</b> | TITLE: 1mm FLP ORCA ASSEMBLY.<br>RECTANGULAR LENS CAP                                                                                                           |                       |
| CHECKED:<br><b>F. Jensen</b>                         | DATE:<br><b>07/07/09</b> | PART NO:<br><b>R1R-X.X-XXX</b>                                                                                                                                  | REVISION:<br><b>A</b> |
|                                                      |                          | CAGE CODE : 32559                                                                                                                                               | SHEET # 2 OF 2        |
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