



| 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) |               |               |                                     |                 |                       |         |              |        |     |     |          |      |                             |                  |
| R10-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           |
| R10-X.X-GRN                        | R20GRN-4-0045 | GREEN         | 516 - 526                           |                 | 220                   | 50      | 100          | 3.0    | 3.4 | 3.8 | 6000     | 8000 | 45                          | FIG. A           |
| R10-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) |               |               |                                     |                 |                       |         |              |        |     |     |          |      |                             |                  |
| R10-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           |
| R10-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)     |               |               |                                     |                 |                       |         |              |        |     |     |          |      |                             |                  |
| R10-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 |                             |                  |
| R10-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  |                             |                  |
| R10-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 |                             |                  |
| R10-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  |                             |                  |

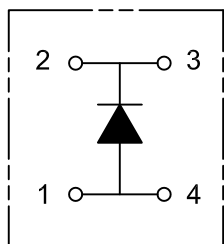


FIG. A

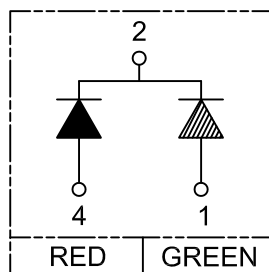


FIG. B

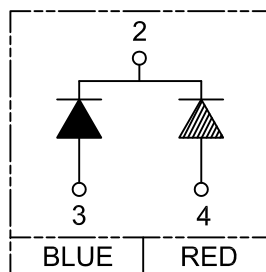


FIG. C

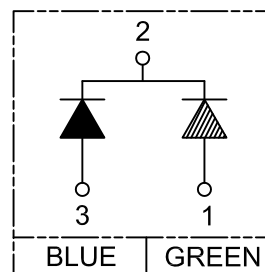


FIG. D

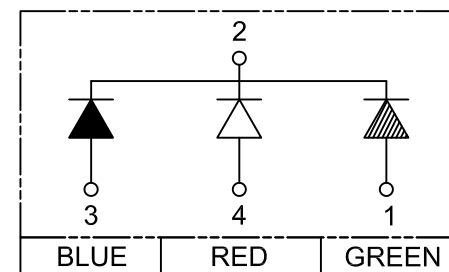


FIG. E

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>07/07/09</b> | <b>TITLE:</b> 1mm FLP ORCA ASSEMBLY,<br>OVAL LENS CAP<br><br><b>PART NO:</b> R10-X.X-XXX<br><b>CAGE CODE :</b> 32559 <b>SHEET #</b> 2 OF 2<br><small>CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.</small> |  |
| CHECKED:<br><b>F. Jensen</b>                         | DATE:<br><b>07/07/09</b> |                                                                                                                                                                                                              |  |