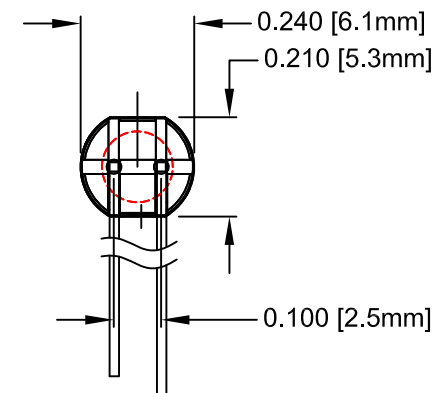
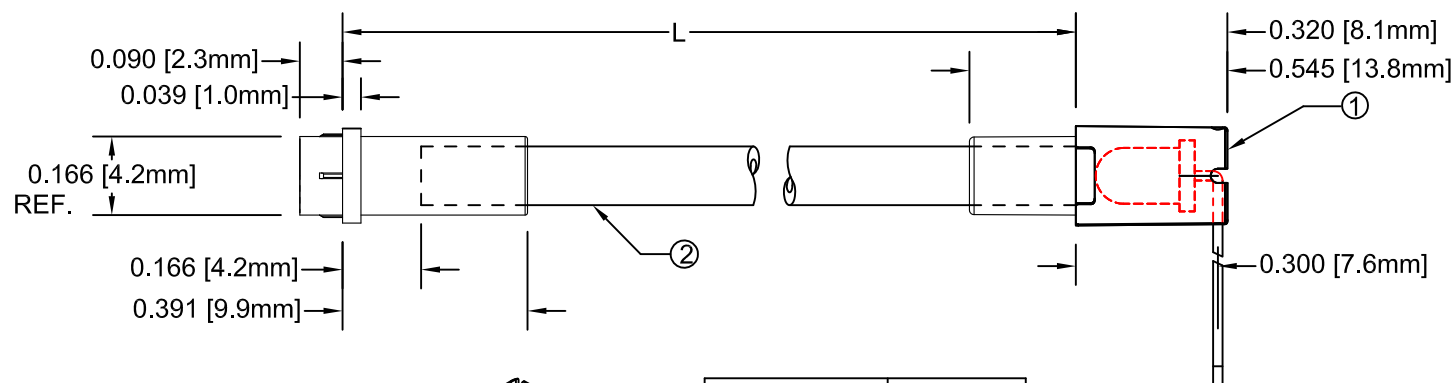


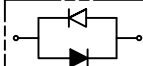
| ITEM | Q'TY | PART NUMBER | PART DESCRIPTION                                                |
|------|------|-------------|-----------------------------------------------------------------|
| 1    | 1    | FLPR2-XX    | Flexible Light Pipe 2mm Adapter, Right Angle w/ LED, See page 2 |
| 2    | 1    | FLPF-XX.X   | Flexible Light Pipe Lens Cap Assembly, 2mm Flat Face            |

| REV. | DESCRIPTION                            | DATE     | APPROVED |
|------|----------------------------------------|----------|----------|
| A    | Engineering Release                    | 09/14/09 | T. Y.    |
| B    | Replaced 3UWC-0.6K-F with 3UWC1.035C-F | 04/26/12 | T. Y.    |
| C    | Updated Table For Length "L"           | 11/16/12 | T. Y.    |
|      |                                        |          |          |
|      |                                        |          |          |
|      |                                        |          |          |

NOTE: FLPR2-XX ADAPTER SHIPPED NON-ASSEMBLED

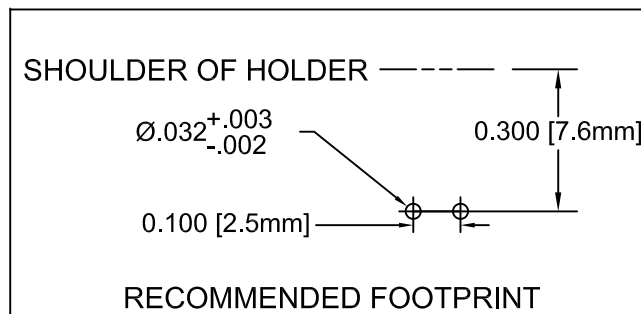
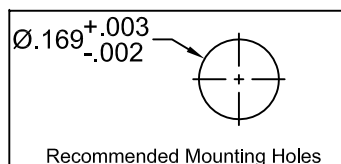
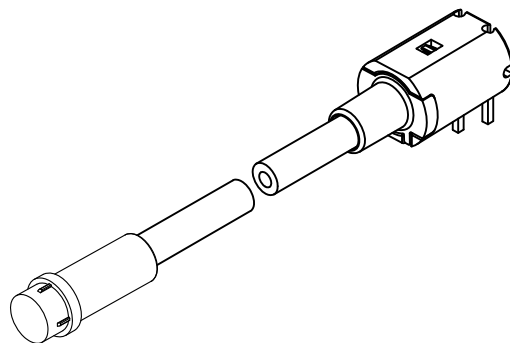


 SINGLE COLOR LED  
SHORT LEAD CATHODE

 BI-COLOR LED'S

| " L " *          | Tolerance |
|------------------|-----------|
| 1.0" ~ 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



| SHORT LEAD CATHODE | LED PART NO. | LONG LEAD CATHODE |
|--------------------|--------------|-------------------|
| RED                | 3xBCC-F      | GREEN             |
| YELLOW             | 3xBCC-Y/G-F  | GREEN             |
| RED                | 3xBCC-R/Y-F  | YELLOW            |
| AMBER              | 3xBCC-A/G-F  | GREEN             |

## 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><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°                  |                                                                                                                                                                                              |                       |
| .XX ±.02                                             |                          |                                                                                                                                                                                              |                       |
| .XXX ±.010                                           |                          |                                                                                                                                                                                              |                       |
| DESIGNED:<br><b>Brian Oliver</b>                     | DATE:<br><b>09/14/09</b> | TITLE: FLEXIBLE LIGHT PIPE ASSY,<br>FLAT FACE, RIGHT ANGLE                                                                                                                                   |                       |
| CHECKED:<br><b>Fred Jensen</b>                       | DATE:<br><b>09/14/09</b> | PART NO:<br><b>FLP2FRX.X-XXX</b>                                                                                                                                                             | REVISION:<br><b>C</b> |
|                                                      |                          | CAGE CODE : 32559                                                                                                                                                                            | SHEET # 1 OF 2        |
| CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.      |                          |                                                                                                                                                                                              |                       |

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

#### SINGLE COLOR ASSEMBLIES

| Assembly Part No. | Emitted Color | LED Part No. |
|-------------------|---------------|--------------|
| FLP2FRX.X-SA      | AMBER         | 3SAC-F       |
| FLP2FRX.X-UBW     | BLUE          | 3UBWC-0.6K-F |
| FLP2FRX.X-SG      | GREEN         | 3SGC-F       |
| FLP2FRX.X-UG      | GREEN         | 3UGC-F       |
| FLP2FRX.X-SUG     | GREEN         | 3SUGC-F      |
| FLP2FRX.X-UO      | ORANGE        | 3UOC-F       |
| FLP2FRX.X-SUO     | ORANGE        | 3SUOC-F      |
| FLP2FRX.X-SR      | RED           | 3SRC-F       |
| FLP2FRX.X-UR      | RED           | 3URC-F       |
| FLP2FRX.X-SUR     | RED           | 3SURC-F      |
| FLP2FRX.X-UT      | TURQUOISE     | 3UTC-F       |
| FLP2FRX.X-SY      | YELLOW        | 3SYC-F       |
| FLP2FRX.X-UY      | YELLOW        | 3UYC-F       |
| FLP2FRX.X-SUY     | YELLOW        | 3SUYC-F      |
| FLP2FRX.X-UUY     | YELLOW        | 3UUYC-F      |
| FLP2FRX.X-UW      | WHITE         | 3UWC1.035C-F |

#### BI-COLOR ASSEMBLIES

| Assembly Part No. | Emitted Color | LED Part No. |
|-------------------|---------------|--------------|
| FLP2FRX.X-BC      | HE RED        | 3BCC-F       |
|                   | GREEN         |              |
| FLP2FRX.X-YG      | YELLOW        | 3BCC-Y/G-F   |
|                   | GREEN         |              |
| FLP2FRX.X-RY      | YELLOW        | 3BCC-R/Y-F   |
|                   | HE RED        |              |
| FLP2FRX.X-AG      | AMBER         | 3BCC-A/G-F   |
|                   | GREEN         |              |
| FLP2FRX.X-SBC     | SUPER RED     | 3SBCC-F      |
|                   | HE GREEN      |              |
| FLP2FRX.X-SYG     | SUPER YELLOW  | 3SBCC-Y/G-F  |
|                   | HE GREEN      |              |
| FLP2FRX.X-SRY     | SUPER RED     | 3SBCC-R/Y-F  |
|                   | SUPER YELLOW  |              |

FLEXIBLE LIGHT PIPE SERIES FLP2FR X.X - XXX

Emitted Colors

"L" LENGTH, inches  
available in 0.1" increments only  
e.g. 6.0, 11.5

#### NOTES:

1. REFERENCE LED PRINTS FOR OPTICAL/ELECTRICAL SPECIFICATIONS

|                                                      |         |                                                                                                                                                                 |                                                            |
|------------------------------------------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| STANDARD TOLERANCE<br>( UNLESS OTHERWISE SPECIFIED ) |         | <br>4 THOMAS, IRVINE, CA. 92618<br>TEL: (949) 951-8808 FAX: (949) 951-3974 |                                                            |
| DECIMALS                                             | ANGULAR |                                                                                                                                                                 |                                                            |
| DESIGNED:<br><b>Brian Oliver</b>                     |         | DATE:<br><b>09/14/09</b>                                                                                                                                        | TITLE: FLEXIBLE LIGHT PIPE ASSY,<br>FLAT FACE, RIGHT ANGLE |
| CHECKED:<br><b>Fred Jensen</b>                       |         | DATE:<br><b>09/14/09</b>                                                                                                                                        | PART NO:<br><b>FLP2FRX.X-XXX</b>                           |
|                                                      |         | CAGE CODE : 32559                                                                                                                                               | SHEET # 2 OF 2                                             |
| CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.      |         |                                                                                                                                                                 |                                                            |