

NOTES:

1. PARTS ARE SHIPPED NON-ASSEMBLED.
2. SEE SHEET 4 FOR PACKAGING PLAN.

| REVISIONS | | | |
|-----------|---------------------|-----------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| B | Engineering Release | 7/11/2018 | G.O. |

PART NUMBER CONFIGURATION,

LPV4-XXXXX-XXX

LED COLOR (SEE PAGE 3)

LIGHT PIPE CALLOUT (SEE PAGE 2, TABLES A & B)



FLAT FACE LENS

DIMENSIONS ARE APPLICABLE TO BOTH LENS FACES UNLESS OTHERWISE NOTED



DOME FACE LENS



RECOMMENDED SOLDERING PATTERN

| | | | | | |
|---|---------|--|----------------|-------------------------|----------------|
| STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED) | | 4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974 | | | |
| DECIMALS | ANGULAR | | | | |
| .X ± .1 | X° ± 1° | TITLE: BIVAR LIGHT PIPE SYSTEM SAT VERTICAL, 4MM, SINGLE STATION | | | |
| .XX ± .02 | | | | | |
| .XXX ± .010 | | DESIGNED: K. BARON | DATE: 07/11/18 | PART NO: LPV4-XXXXX-XXX | REVISION: B |
| | | REVISED: N/A | DATE: N/A | CAGE CODE: 32559 | |
| | | CHECKED: TD. NGUYEN | DATE: 07/11/18 | SCALE: 2:1 | SHEET # 1 OF 5 |
| CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING | | | | | |

| REVISIONS | | | |
|-----------|-------------|------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| | See Sheet 1 | | |

STANDARD ORDERING INFORMATION

| TABLE A - FLAT FACE LENS | |
|--------------------------|----------------|
| PART NO. | H ± .01 |
| LPV4-0350F-XXX | 0.350 [8.9mm] |
| LPV4-0400F-XXX | 0.400 [10.2mm] |
| LPV4-0450F-XXX | 0.450 [11.4mm] |
| LPV4-0500F-XXX | 0.500 [12.7mm] |
| LPV4-0550F-XXX | 0.550 [14.0mm] |
| LPV4-0600F-XXX | 0.600 [15.2mm] |
| LPV4-0750F-XXX | 0.750 [19.1mm] |
| LPV4-1000F-XXX | 1.000 [25.4mm] |
| LPV4-1250F-XXX | 1.250 [31.8mm] |
| LPV4-1500F-XXX | 1.500 [38.1mm] |
| LPV4-1750F-XXX | 1.750 [44.5mm] |
| LPV4-2000F-XXX | 2.000 [50.8mm] |

| TABLE B - DOME FACE LENS | |
|--------------------------|----------------|
| PART NO. | H ± .01 |
| LPV4-0350D-XXX | 0.350 [8.9mm] |
| LPV4-0400D-XXX | 0.400 [10.2mm] |
| LPV4-0450D-XXX | 0.450 [11.4mm] |
| LPV4-0500D-XXX | 0.500 [12.7mm] |
| LPV4-0550D-XXX | 0.550 [14.0mm] |
| LPV4-0600D-XXX | 0.600 [15.2mm] |
| LPV4-0750D-XXX | 0.750 [19.1mm] |
| LPV4-1000D-XXX | 1.000 [25.4mm] |
| LPV4-1250D-XXX | 1.250 [31.8mm] |
| LPV4-1500D-XXX | 1.500 [38.1mm] |
| LPV4-1750D-XXX | 1.750 [44.5mm] |
| LPV4-2000D-XXX | 2.000 [50.8mm] |



| | | |
|--|----------------|----------------|
| PART NO: LPV4-XXXXX-XXX | | REVISION: B |
| SCALE: NONE | SHEET # 2 OF 5 | |
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| Order Code XXX | Emitted Color | Peak Wave L. | Electro-Optical Data @20mA, 25°C | | | | Polarity Diagram |
|-------------------|----------------------|-----------------------------|----------------------------------|-------------------|-------------------|------------------|---------------------|
| | | λ_p [nm] | V_f [V] | | | I_v [mcd] | |
| | | Chroma TYP | MIN | TYP | MAX | TYP | |
| | | | | | | | |
| R130 | Red | 640 | 1.7 | 2.0 | 2.5 | 130 | FIGURE A |
| R480 | Red | 630 | 1.7 | 2.0 | 2.5 | 480 | FIGURE B |
| A220 | Amber | 610 | 1.7 | 2.0 | 2.5 | 220 | |
| O170 | Orange | 590 | 1.7 | 2.0 | 2.5 | 170 | |
| Y50 | Yellow | 570 | 1.7 | 2.0 | 2.5 | 50 | |
| G850 | Green | 520 | 2.8 | 3.2 | 3.7 | 850 | |
| B150 | Blue | 465 | 2.8 | 3.2 | 3.7 | 150 | |
| W305 | White | X = 0.308 Y = 0.305 | 2.8 | 3.0 | 3.7 | 1750 | FIGURE C |
| OY | Orange Yellow | 590 572 | 1.7 1.7 | 2.0 2.0 | 2.5 2.5 | 190 60 | |
| RY | Red Yellow | 640 572 | 1.7 1.7 | 2.0 2.0 | 2.5 2.5 | 110 55 | FIGURE D |
| RG | Red Green | 640 520 | 1.7 2.8 | 2.0 3.2 | 2.5 3.7 | 200 810 | FIGURE E |
| RW | Red White | 630 X = 0.28 Y = 0.29 | 1.7 2.8 | 2.0 3.2 | 2.5 3.7 | 130 520 | FIGURE F |
| RB | Red Blue | 650 465 | 1.7 2.8 | 2.0 3.2 | 2.5 3.7 | 80 150 | FIGURE G |
| RGB | Red Green Blue | 643 515 460 | 1.7 2.8 2.8 | 2.0 3.3 3.3 | 2.5 3.7 3.7 | 95 730 120 | FIGURE H |



Note: 10% Duty Cycle, Pulse Width \leq 0.1msec for Peak If.



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|--|------------------------------|
| BIVAR [®] | |
| PART NO: LPV4-XXXXX-XXX | REVISION: B |
| SCALE: 2:1 | SHEET # 3 OF 5 |
| CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING | |

PACKAGING PLAN

PARTS ARE SHIPPED IN QUANTITY OF 400 AS IN THE FOLLOWING:

1. ONE BAG CONTAINING FOUR LIGHT PIPE PACKAGES, 100 EACH, AND ONE LEVEL 4 MOISTURE SEALED TRAY WITH 400 SURFACE MOUNT ADAPTERS.
2. BAG SIZE IS APPROXIMATELY 16 X 18 INCHES (406.4 X 457.2 mm).
3. TRAY SIZE IS APPROXIMATELY 10 X 14 X 0.6 INCHES (254 X 355.6 X 15.2 mm), INCLUDING TOP COVER AND BOTTOM TRAY. ADAPTERS ARE ARRANGED AS SHOWN IN FIGURE 1.

10 ADAPTERS IN EACH POCKET



FIGURE 1
BOTTOM TRAY
4 X 10 POCKETS

| | | |
|--|----------------|-----------|
| BIVAR [®] | | REVISION: |
| PART NO: LPV4-XXXXX-XXX | | B |
| SCALE: NONE | SHEET # 4 OF 5 | |
| CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING | | |

RECOMMENDED REFLOW SOLDERING PROFILE



NOTE:

1. DO NOT CLEAN AFTER SOLDERING. ONLY USE NO-CLEAN SOLDER PASTE.

| | | |
|---|-----------------------|-----------|
| BIVAR [®] | | REVISION: |
| PART NO: LPV4-XXXXX-XXX | | B |
| SCALE: NONE | SHEET # 5 OF 5 | |
| <small>CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING</small> | | |