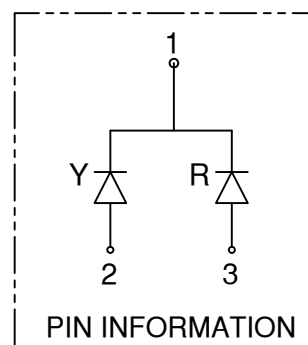
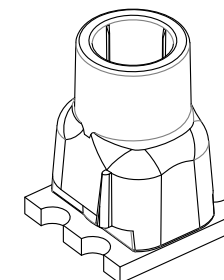
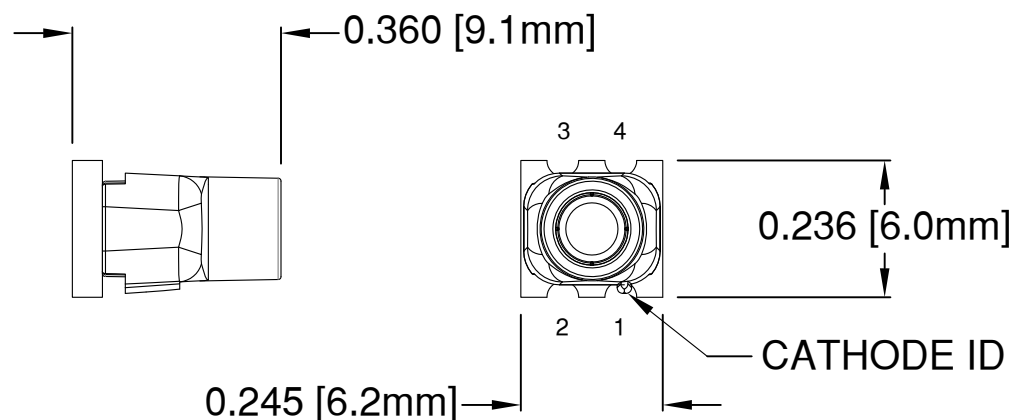


| REV. | DESCRIPTION                                | DATE     | APPROVED |
|------|--------------------------------------------|----------|----------|
| B    | Engineering Release                        | 02/27/15 | J. C.    |
| C    | Revised Side View, See Page 4              | 03/20/15 | J. C.    |
| D    | Corrected Typo in Recom. Soldering Pattern | 09/12/16 | J. C.    |
|      |                                            |          |          |
|      |                                            |          |          |



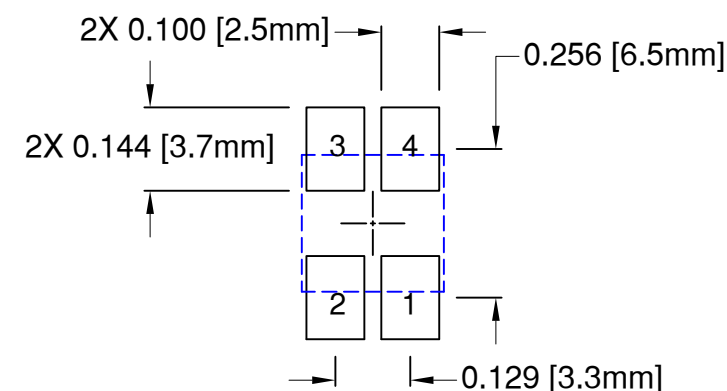
## ABSOLUTE MAXIMUM RATINGS at Ta=25°C

|                             |                     |
|-----------------------------|---------------------|
| REVERSE VOLTAGE             | 5V                  |
| REVERSE CURRENT             | 100μA               |
| OPERATING TEMPERATURE RANGE | -35°C - 85°C        |
| STORAGE TEMPERATURE         | -35°C - 85°C        |
| MAX SOLDERING TEMPERATURE   | 260°C FOR 3 SECONDS |

## NOTES:

- DERATING OF FORWARD CURRENT PER SEGMENT, 0.30mA/°C at T ≥ 25°C
- ACCEPTS BIVAR FLEXIBLE LIGHT PIPE STYLE FLPS2031

## RECOMMENDED SOLDERING PATTERN



|                                                      |                                                                                       |                                                                                                                                                                 |  |
|------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| STANDARD TOLERANCE<br>( UNLESS OTHERWISE SPECIFIED ) |                                                                                       | <br>4 THOMAS, IRVINE, CA. 92618<br>TEL: (949) 951-8808 FAX: (949) 951-3974 |  |
| <u>DECIMALS</u>                                      | <u>ANGULAR</u>                                                                        |                                                                                                                                                                 |  |
| .X ± .1                                              | X° ± 1°                                                                               |                                                                                                                                                                 |  |
| .XX ± .02                                            |                                                                                       |                                                                                                                                                                 |  |
| .XXX ± .010                                          |                                                                                       |                                                                                                                                                                 |  |
|                                                      |  | <b>TITLE:</b> SMT FLP VERTICAL ADAPTER<br>BI-COLOR, RED/YELLOW                                                                                                  |  |
| DESIGNED:                                            | DATE:                                                                                 | REVISION                                                                                                                                                        |  |
| <b>A. Wright</b>                                     | <b>03/13/14</b>                                                                       | <b>PART NO:</b><br>SMTV01-RXXYXX<br><b>D</b>                                                                                                                    |  |
| CHECKED:                                             | DATE:                                                                                 |                                                                                                                                                                 |  |
| <b>B. Oliver</b>                                     | <b>03/13/14</b>                                                                       |                                                                                                                                                                 |  |
|                                                      |                                                                                       | <b>CAGE CODE :</b> 32559 <b>SHEET # 1 OF 4</b>                                                                                                                  |  |
| CAD GENERATED DOCUMENT. DO NOT MEASURE DRAWING.      |                                                                                       |                                                                                                                                                                 |  |

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

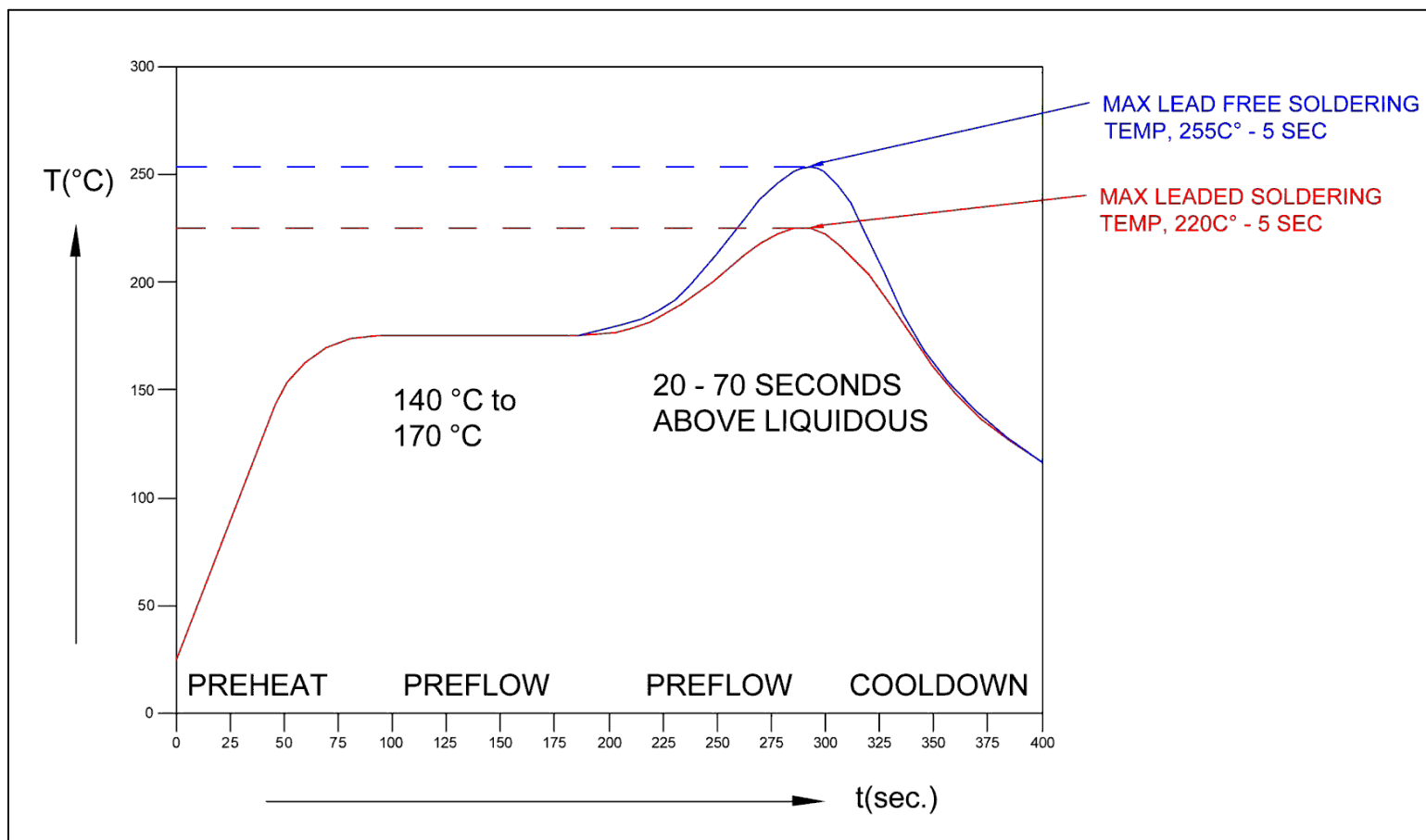
| Part Number   | Chip             |                  |     |     | Absolute Maximum Ratings<br>Per Segment |               |                    | Electro-Optical Data<br>@20mA, 25°C |     |     |                |
|---------------|------------------|------------------|-----|-----|-----------------------------------------|---------------|--------------------|-------------------------------------|-----|-----|----------------|
|               | Emitted<br>Color | $\lambda_D$ [nm] |     |     | $P_d$<br>[mW]                           | $I_f$<br>[mA] | Peak $I_f$<br>[mA] | $V_f$<br>[V]                        |     |     | $I_v$<br>[mcd] |
|               |                  | MIN              | TYP | MAX |                                         |               |                    | MIN                                 | TYP | MAX |                |
| SMTV01-R08Y08 | RED              | 625              | 628 | 630 | 60                                      | 25            | 100                | 1.7                                 | 2.1 | 2.6 | 78             |
|               | YELLOW           | 585              | 590 | 595 | 60                                      | 25            | 100                | 1.8                                 | 2.1 | 2.6 | 82             |
| SMTV01-R15Y11 | RED              | 625              | 628 | 630 | 60                                      | 25            | 100                | 1.7                                 | 2.1 | 2.6 | 150            |
|               | YELLOW           | 585              | 590 | 595 | 60                                      | 25            | 100                | 1.8                                 | 2.1 | 2.6 | 110            |
| SMTV01-R16Y14 | RED              | 625              | 628 | 630 | 60                                      | 25            | 100                | 1.7                                 | 2.1 | 2.6 | 163            |
|               | YELLOW           | 585              | 590 | 595 | 60                                      | 25            | 100                | 1.8                                 | 2.1 | 2.6 | 143            |

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

|                                                      |                          |                                                                                                                                                                  |                                                         |
|------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| STANDARD TOLERANCE<br>( UNLESS OTHERWISE SPECIFIED ) |                          | <br>4 THOMAS, IRVINE, CA. 92618<br>TEL.: (949) 951-8808 FAX: (949) 951-3974 |                                                         |
| DECIMALS                                             | ANGULAR                  |                                                                                                                                                                  |                                                         |
| .X $\pm .1$                                          | X° $\pm 1^\circ$         |                                                                             | TITLE: SMT FLP VERTICAL ADAPTER<br>BI-COLOR, RED/YELLOW |
| .XX $\pm .02$                                        |                          |                                                                                                                                                                  |                                                         |
| .XXX $\pm .010$                                      |                          |                                                                                                                                                                  |                                                         |
| DESIGNED:<br><b>A. Wright</b>                        | DATE:<br><b>03/13/14</b> | PART NO:<br>SMTV01-RXXYXX                                                                                                                                        | REVISION:<br><b>D</b>                                   |
| CHECKED:<br><b>B. Oliver</b>                         | DATE:<br><b>03/13/14</b> | CAGE CODE : 32559                                                                                                                                                | SHEET # 2 OF 4                                          |
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|------|--------------|------|----------|
|      | SEE SHEET #1 |      |          |
|      |              |      |          |
|      |              |      |          |
|      |              |      |          |
|      |              |      |          |

## Recommended Reflow Soldering Profile

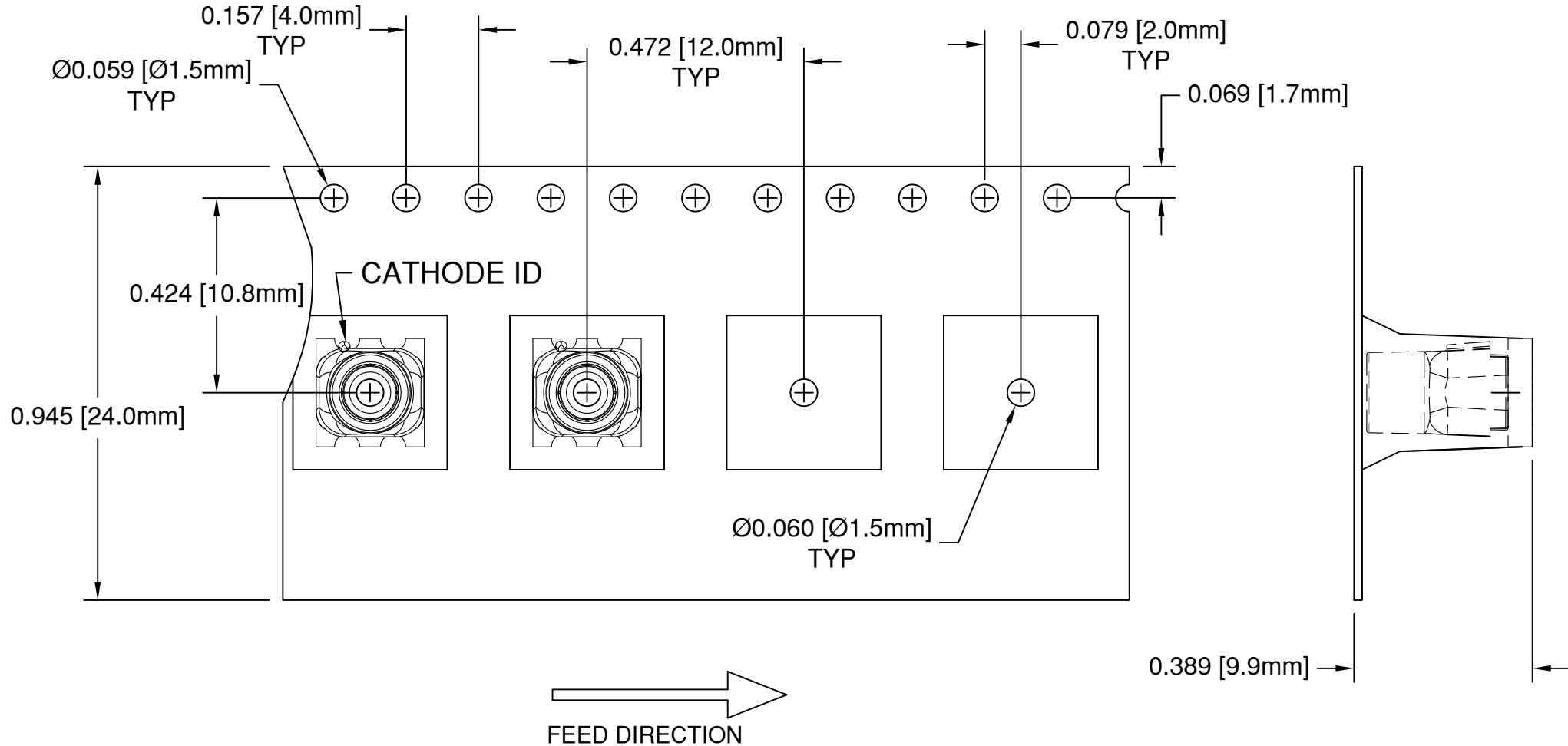


### NOTE:

1. Do not clean after soldering. Only use no-clean solder paste.

|                                                      |                   |                                                                                                                                                                 |                                                         |
|------------------------------------------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| STANDARD TOLERANCE<br>( UNLESS OTHERWISE SPECIFIED ) |                   | <br>4 THOMAS, IRVINE, CA. 92618<br>TEL: (949) 951-8808 FAX: (949) 951-3974 |                                                         |
| DECIMALS                                             | ANGULAR           |                                                                                                                                                                 |                                                         |
| .X ± .1                                              | X° ± 1°           |                                                                            | TITLE: SMT FLP VERTICAL ADAPTER<br>BI-COLOR, RED/YELLOW |
| .XX ± .02                                            |                   |                                                                                                                                                                 | PART NO: SMTV01-RXXYXX                                  |
| .XXX ± .010                                          |                   |                                                                                                                                                                 | REVISION: D                                             |
| DESIGNED:<br>A. Wright                               | DATE:<br>03/13/14 | CAGE CODE : 32559                                                                                                                                               | SHEET # 3 OF 4                                          |
| CHECKED:<br>B. Oliver                                | DATE:<br>03/13/14 | CAD GENERATED DOCUMENT. DO NOT MEASURE DRAWING.                                                                                                                 |                                                         |

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|------|--------------|------|----------|
|      | SEE SHEET #1 |      |          |
|      |              |      |          |
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|      |              |      |          |
|      |              |      |          |



# NOTES:

3. MOISTURE SENSITIVITY LEVEL: 4
2. UNLESS OTHERWISE SPECIFIED, PACKAGING TO COMPLY WITH EIA-481-D
1. 500 pcs PER REEL

|                                                      |                          |                                                                                                                                                                 |                                                         |
|------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| STANDARD TOLERANCE<br>( UNLESS OTHERWISE SPECIFIED ) |                          | <br>4 THOMAS, IRVINE, CA. 92618<br>TEL: (949) 951-8808 FAX: (949) 951-3974 |                                                         |
| <u>DECIMALS</u>                                      | <u>ANGULAR</u>           |                                                                                                                                                                 |                                                         |
| .X ± .1                                              | X° ± 1°                  |                                                                                                                                                                 |                                                         |
| .XX ± .02                                            |                          |                                                                            | TITLE: SMT FLP VERTICAL ADAPTER<br>BI-COLOR, RED/YELLOW |
| .XXX ± .010                                          |                          |                                                                                                                                                                 |                                                         |
| DESIGNED:<br><b>A. Wright</b>                        | DATE:<br><b>03/13/14</b> | PART NO: SMTV01-RXXYXX                                                                                                                                          |                                                         |
| CHECKED:<br><b>B. Oliver</b>                         | DATE:<br><b>03/13/14</b> | CAGE CODE : 32559                                                                                                                                               | SHEET # 4 OF 4                                          |
| CAD GENERATED DOCUMENT. DO NOT MEASURE DRAWING.      |                          |                                                                                                                                                                 |                                                         |