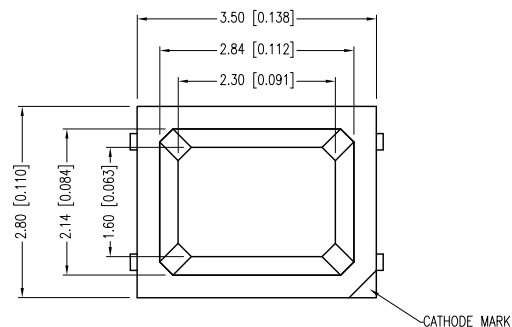
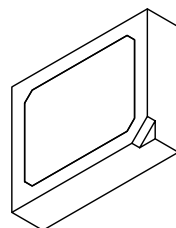
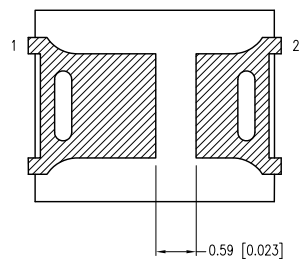
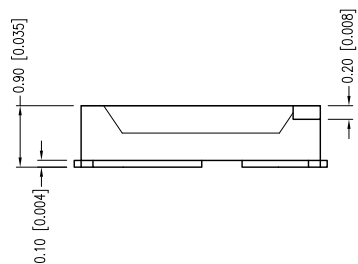




+10 → 2-



| ELECTRO-OPTICAL CHARACTERISTICS $T_a=25^{\circ}\text{C}$ $I_f=20\text{mA}$ |             |     |      |     |                           |
|----------------------------------------------------------------------------|-------------|-----|------|-----|---------------------------|
| PARAMETER                                                                  | SYMBOL      | MIN | TYP  | MAX | UNITS TEST COND           |
| PEAK WAVELENGTH                                                            |             |     | 636  |     | nm                        |
| FORWARD VOLTAGE                                                            | $V_f$       | 1.8 | 2.1  | 2.4 | $V_f$                     |
| REVERSE VOLTAGE                                                            | $V_r$       | 5.0 |      |     | $V_r$ $I_r=10\mu\text{A}$ |
| LUMINOUS INTENSITY                                                         | $I_v$       |     | 1500 |     | mcd $I_f=20\text{mA}$     |
| VIEWING ANGLE                                                              |             |     | 120  |     | $2\times$ theta           |
| EMITTED COLOR:                                                             | RED         |     |      |     |                           |
| LENS FINISH:                                                               | WATER CLEAR |     |      |     |                           |

LIMITS OF SAFE OPERATION AT  $25^{\circ}\text{C}$ 

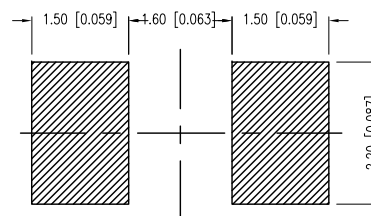
| PARAMETER                        | MAX        | UNITS                  |
|----------------------------------|------------|------------------------|
| DC FORWARD CURRENT               | 60         | mA                     |
| STEADY CURRENT                   | 160        | mA                     |
| POWER DISSIPATION                | 180        | mW                     |
| DERATE FROM $25^{\circ}\text{C}$ | -1.25      | mW/ $^{\circ}\text{C}$ |
| OPERATING TEMP.                  | -40 TO +80 | $^{\circ}\text{C}$     |
| STORAGE TEMP.                    | -40 TO +85 | $^{\circ}\text{C}$     |

\*1/10 DUTY CYCLE, 0.1ms PULSE WIDTH.

CAUTION: STATIC SENSITIVE DEVICE  
FOLLOW PROPER E.S.D. HANDLING PROCEDURES  
WHEN WORKING WITH THIS PART.

CAUTION: MOISTURE SENSITIVE DEVICE  
PER JEDEC LEVEL 3 STANDARDS

## RECOMMENDED SOLDER PAD LAYOUT



\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE:  $X=\pm 1$  ( $\pm 0.039$ ),  $X.X=\pm 0.5$  ( $\pm 0.020$ ),  $X.XX=\pm 0.25$  ( $\pm 0.010$ ),  $X.XXX=\pm 0.127$  ( $\pm 0.005$ ). LEAD SIZE= $\pm 0.05$  ( $\pm 0.002$ ), LEAD LENGTH= $\pm 0.75$  ( $\pm 0.030$ ). MIN.=  $^{+0.00}_{-0.00}$  DECIMAL PRECISION MAX.=  $^{+0.00}_{-0.00}$  DECIMAL PRECISION

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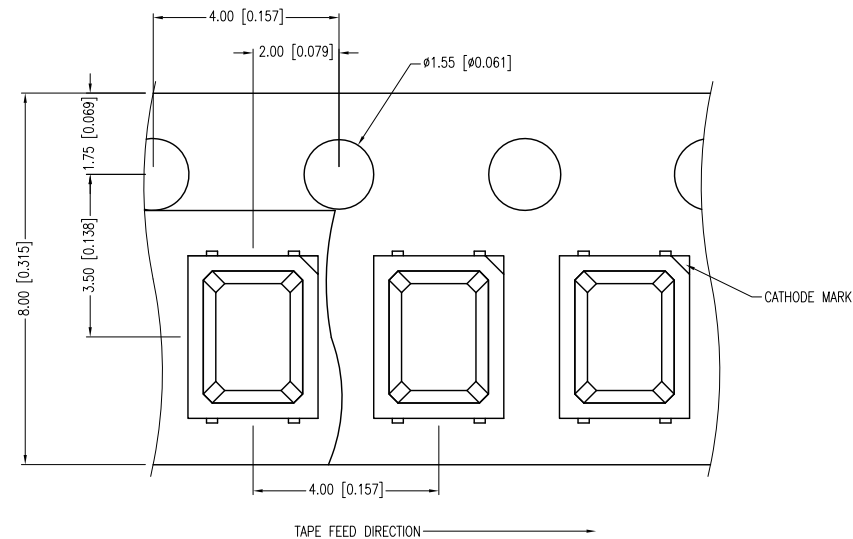
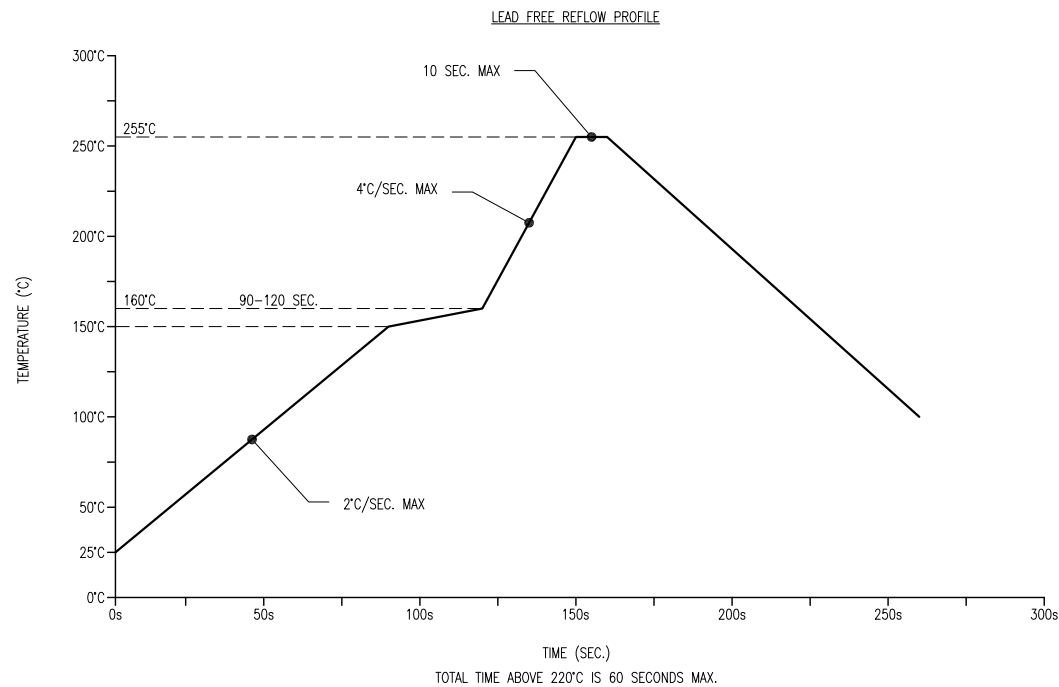
3.5mm x 2.8mm 0.2W SMT LED, 636nm RED, WATER CLEAR, TAPE & REEL.

\*\*THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT.\*\*

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| PAGE:  | 1 OF 2    | CHKD BY:  | DT   |
| SCALE: | NTS       | APRVD BY: | DT   |
| UNIT:  | mm [INCH] |           | (Pb) |



\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN.= <sup>+0.00</sup>/<sub>-0.00</sub> DECIMAL PRECISION MAX.= <sup>+0.00</sup>/<sub>-0.00</sub> DECIMAL PRECISION

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3.5mm x 2.8mm 0.2W SMT LED, 636nm RED, WATER CLEAR, TAPE & REEL.

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