

ELECTRO-OPTICAL CHARACTERISTICS  $T_A=25^{\circ}\text{C}$   $I_f=500\text{mA}$

| PARAMETER          | MIN         | TYP | MAX | UNITS    | TEST COND              |
|--------------------|-------------|-----|-----|----------|------------------------|
| DOM. WAVELENGTH    |             | 635 |     | nm       |                        |
| FORWARD VOLTAGE    | 2.0         | 2.7 | 3.3 | $V_f$    | $I_f = 500\text{mA}$   |
| REVERSE VOLTAGE    | 5.0         |     |     | $V_r$    | $I_r = 100\mu\text{A}$ |
| AXIAL INTENSITY    | 35          | 50  | 60  | lm       | $I_f = 500\text{mA}$   |
| VIEWING ANGLE      |             | 100 |     | 2x theta |                        |
| EMITTED COLOR:     | RED         |     |     |          |                        |
| EPOXY LENS FINISH: | WATER CLEAR |     |     |          |                        |

LIMITS OF SAFE OPERATION AT 25°C

| PARAMETER                | MAX         | UNITS |
|--------------------------|-------------|-------|
| PEAK FORWARD CURRENT*    | 700         | mA    |
| STEADY CURRENT           | 500         | mA    |
| LED JUNCTION TEMPERATURE | 110         | °C    |
| THERMAL RESISTANCE       | 12          | °C/W  |
| OPERATING, STORAGE TEMP. | -40 TO +100 | °C    |

\* $T < 10\mu\text{s}$

[A] NOTE:

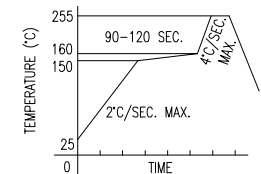
1. WE RECOMMEND THAT THE DEVICES MUST BE BAKED BEFORE SOLDERING IF THEY ARE REMOVED FROM THE ORIGINAL PACKAGE, AND ARE EXPOSED TO ENVIRONMENTAL CONDITIONS FOR LONGER THAN THE DURATIONS; (UNIT: DAYS) DEFINED IN THE TABLE BELOW.
2. RECOMMENDED BAKING CONDITIONS ARE 24 HOURS AT 80°C

[A]

| TEMPERATURE | MAXIMUM PERCENT RELATIVE HUMIDITY |     |     |     |     |     |     |  |
|-------------|-----------------------------------|-----|-----|-----|-----|-----|-----|--|
|             | 30%                               | 40% | 50% | 60% | 70% | 80% | 90% |  |
| 30°C        | 9                                 | 5   | 4   | 3   | 1   | 1   | 1   |  |
| 25°C        | 12                                | 7   | 5   | 4   | 2   | 1   | 1   |  |
| 20°C        | 17                                | 9   | 7   | 6   | 2   | 2   | 1   |  |

LEAD FREE REFLOW PROFILE

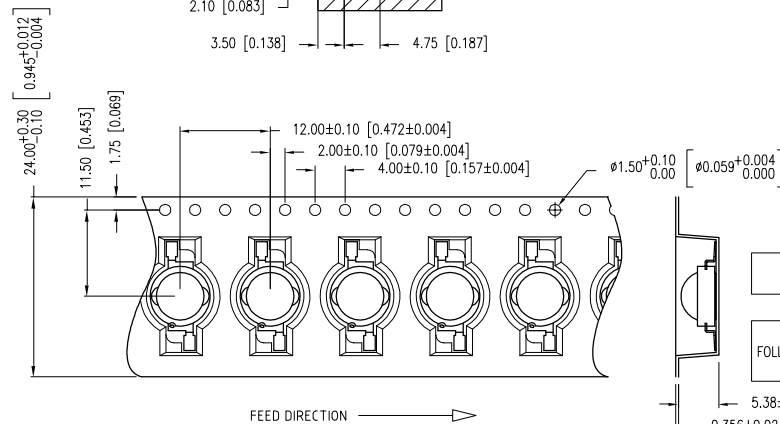
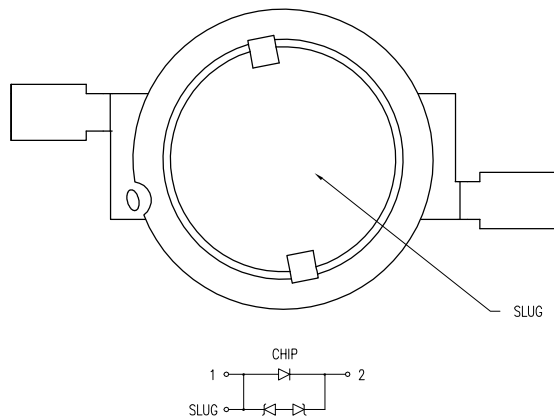
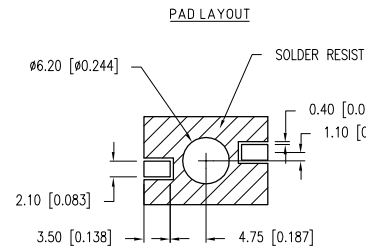
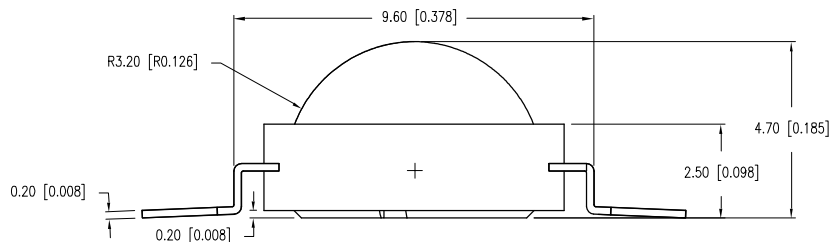
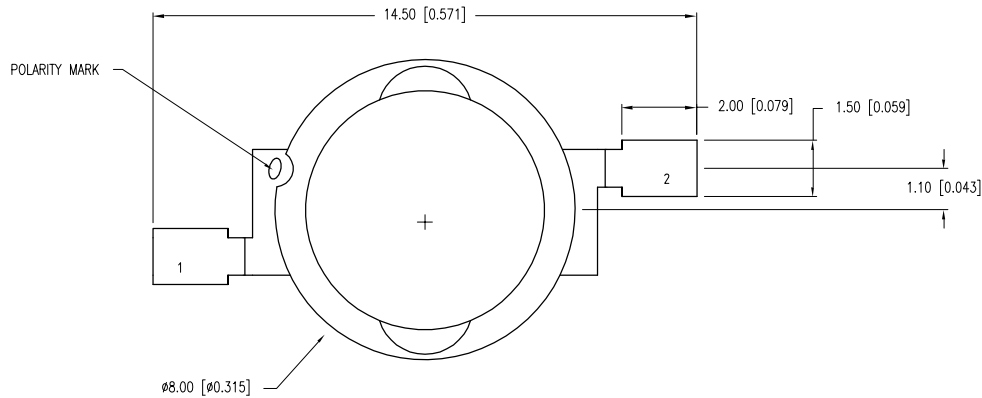
10 SEC. MAX.



TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.

CAUTION: MOISTURE SENSITIVE DEVICE  
PER JEDEC LEVEL 3 STANDARDS

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



\*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.=+DECIMAL PRECISION -0.00, MAX.=+0.00 -DECIMAL PRECISION



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8mm ROUND TOP DOME SMT HI POWER LED RED 2W.

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

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|--------|-----------|-----------|----|
| DATE:  | 06.28.10  | DRAWN BY: | JN |
| PAGE:  | 1 OF 1    | CHKD BY:  | SS |
| SCALE: | N/A       | APRVD BY: | KF |
| UNIT:  | mm [INCH] |           |    |