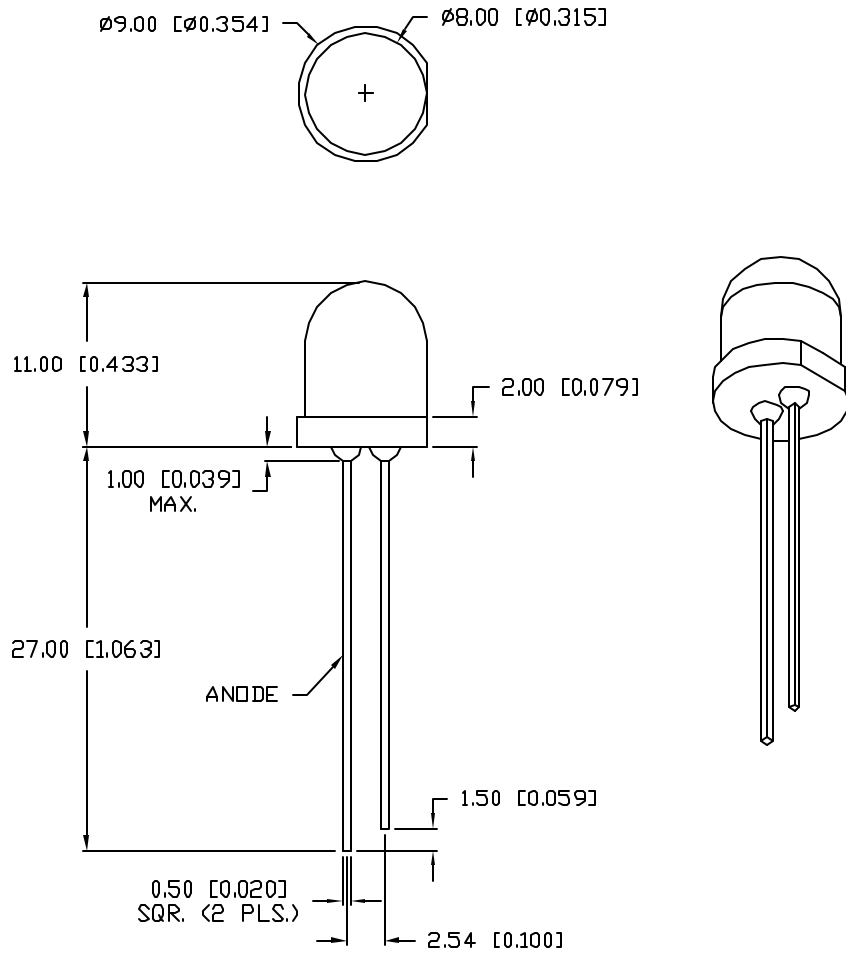


UNCONTROLLED DOCUMENT

|                  |                                     |         |
|------------------|-------------------------------------|---------|
| PART NUMBER      |                                     | REV.    |
| SSL-LX80113SRD/X |                                     | A       |
| REV.             | E.C.N. NUMBER AND REVISION COMMENTS | DATE    |
| A                | E.C.N. #10BRDR. & REDRAWN.          | 2.14.01 |



ELECTRO-OPTICAL CHARACTERISTICS  $T_A=25^{\circ}\text{C}$   $I_f=20\text{mA}$

| PARAMETER          | MIN          | TYP       | MAX | UNITS | TEST COND            |
|--------------------|--------------|-----------|-----|-------|----------------------|
| PEAK WAVELENGTH    |              | 660 (RED) |     | nm    |                      |
| FORWARD VOLTAGE    |              | 1.7       | 2.2 | $V_f$ |                      |
| REVERSE VOLTAGE    | 4.0          |           |     | $V_r$ | $I_f=100\mu\text{A}$ |
| AXIAL INTENSITY    |              | 500       |     | mcd   | $I_f=20\text{mA}$    |
| /B                 | 500          | 1000      |     | mcd   | $I_f=20\text{mA}$    |
| /C                 | 1000         | 1300      |     | mcd   | $I_f=20\text{mA}$    |
| /D                 | 1300         | 1600      |     | mcd   | $I_f=20\text{mA}$    |
| /E                 | 1600         | 2000      |     | mcd   | $I_f=20\text{mA}$    |
| /F                 | 2000         | 3500      |     | mcd   | $I_f=20\text{mA}$    |
| /G                 | 3500         | 4500      |     | mcd   | $I_f=20\text{mA}$    |
| VIEWING ANGLE      |              | 60        |     |       | 2x theta             |
| EMITTED COLOR:     | SUPER RED    |           |     |       |                      |
| EPOXY LENS FINISH: | RED DIFFUSED |           |     |       |                      |

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

| PARAMETER                        | MAX        | UNITS                  |
|----------------------------------|------------|------------------------|
| PEAK FORWARD CURRENT*            | 150        | mA                     |
| STEADY CURRENT                   | 30         | mA                     |
| POWER DISSIPATION                | 105        | mW                     |
| DERATE FROM $25^{\circ}\text{C}$ | -1.2       | mW/ $^{\circ}\text{C}$ |
| OPERATING, STORAGE TEMP.         | -40 TO +85 | $^{\circ}\text{C}$     |
| SOLDERING TEMP.                  | +260       | $^{\circ}\text{C}$     |
| 2.0mm FROM BODY                  |            | 3 SEC. MAX             |

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

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

UNCONTROLLED DOCUMENT

|  |                  |
|--|------------------|
| REV.   | PART NUMBER      |
| A  | SSL-LX80113SRD/X |
| T-8mm 660nm SUPER RED LED,<br>RED DIFFUSED LENS. |                  |

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**RELIABILITY NOTE**  
 OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.



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|           |             |              |              |
|-----------|-------------|--------------|--------------|
| DRAWN BY: | CHECKED BY: | APPROVED BY: | DATE:        |
| BC        |             |              | 9.18.92      |
|           |             |              | PAGE: 1 OF 1 |
|           |             |              | SCALE: N/A   |