



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

| PARAMETER          | MIN         | TYP | MAX | UNITS    | TEST COND            |
|--------------------|-------------|-----|-----|----------|----------------------|
| PEAK WAVELENGTH    |             | 635 |     | nm       |                      |
| FORWARD VOLTAGE    |             | 2.0 | 2.5 | $V_f$    |                      |
| REVERSE VOLTAGE    | 5.0         |     |     | $V_r$    | $I_f=100\mu\text{A}$ |
| AXIAL INTENSITY    | 1.0         | 30  |     | med      | $I_f=20\text{mA}$    |
|                    |             |     |     | med      | $I_f=2\text{mA}$     |
| VIEWING ANGLE      |             | 60  |     | 2x theta |                      |
| EMITTED COLOR:     | RED         |     |     |          |                      |
| EPOXY LENS FINISH: | MILKY WHITE |     |     |          |                      |

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 $25^{\circ}\text{C}$ | -1.6       | 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=±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> -0.00 DECIMAL PRECISION MAX= <sup>+0.00</sup> -0.00 DECIMAL PRECISION

|      |                              |
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| REV. | PART NUMBER<br>SSL-LX3044LIW |
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T-3mm (T-1) 635nm RED LED,  
MILKY WHITE DIFFUSED LENS, LOW CURRENT OPERATION.

**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:<br>BC | CHECKED BY: | APPROVED BY: | DATE: 4.9.01 |
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|                 |             |              | SCALE: N/A   |