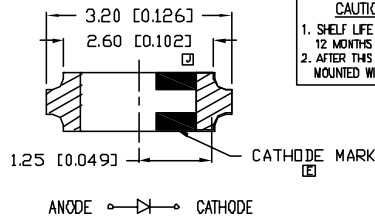
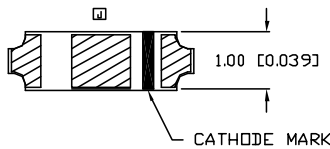
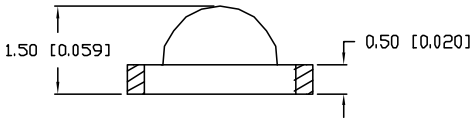
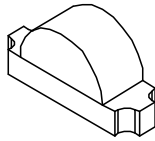


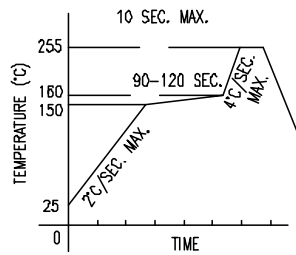
UNCONTROLLED DOCUMENT



CAUTION: MOISTURE SENSITIVE DEVICE
 1. SHELF LIFE IN SEALED BAG:
 12 MONTHS AT <40°C AND <80% RELATIVE HUMIDITY (RH).
 2. AFTER THIS BAG IS OPENED, DEVICES HAVE TO BE
 MOUNTED WITHIN 48 HOURS OR STORED AT <30% RH.

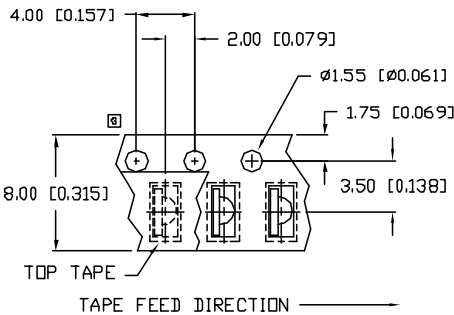
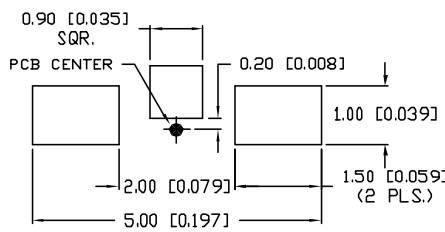


LEAD FREE REFLOW PROFILE



TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.

RECOMMENDED SOLDER PAD LAYOUT



*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), XX=±0.5 (±0.020), XXX=±0.25 (±0.010), XXXX=±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

PART NUMBER
SML-LXR851C-TR

REV.
K

| REV. | E.C.N. NUMBER AND REVISION COMMENTS | DATE |
|------|-------------------------------------|----------|
| A | E.C.N. #10230. | 8.23.96 |
| B | E.C.N. #10263. | 10.24.96 |
| C | E.C.N. #10338. | 5.2.97 |
| D | E.C.N. #10366. | 7.22.97 |
| E | E.C.N. #10380. | 9.19.97 |
| F | E.C.N. #10BRDR & REDRAWN. | 10.15.97 |
| G | E.C.N. #10419. | 3.5.98 |
| H | E.C.N. #10471. | 10.23.98 |
| I | E.C.N. #10644. | 7.18.00 |
| J | E.C.N. #10BRDR. & #10771. | 7.30.01 |
| K | E.C.N. #11248. | 8.12.05 |

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 | 2.6 | V_f | |
| REVERSE VOLTAGE | 5.0 | | | V_r | $I_f=100\mu\text{A}$ |
| AXIAL INTENSITY | | 12 | | mcad | $I_f=20\text{mA}$ |
| VIEWING ANGLE | | 130 | | 2x theta | |
| EMITTED COLOR: | RED | | | | |
| EPOXY LENS FINISH: | WATER CLEAR | | | | |

LIMITS OF SAFE OPERATION AT 25°C

| PARAMETER | MAX | UNITS |
|-----------------------|------------|-------|
| PEAK FORWARD CURRENT* | 100 | mA |
| STEADY CURRENT | 25 | mA |
| POWER DISSIPATION | 65 | mW |
| DERATE FROM 25°C | -1.2 | mW/°C |
| OPERATING TEMP. | -25 TO +85 | °C |
| STORAGE TEMP. | -30 TO +85 | °C |

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

NOTES:

- 3,000 PIECES PER REEL.
- THE CATHODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.

UNCONTROLLED DOCUMENT

| | |
|--|-------------------------------|
| REV. K | PART NUMBER SML-LXR851C-TR |
| 0.5mm x 3.2mm PCB, RIGHT ANGLE SURFACE MOUNT LED, 635nm RED, WATER CLEAR LENS, 3K PER REEL. | |

CONFIDENTIAL INFORMATION
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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: CT | CHECKED BY: | APPROVED BY: | DATE: 4.24.96 PAGE: 1 OF 1 SCALE: N/A |
|-----------------|-------------|--------------|---|