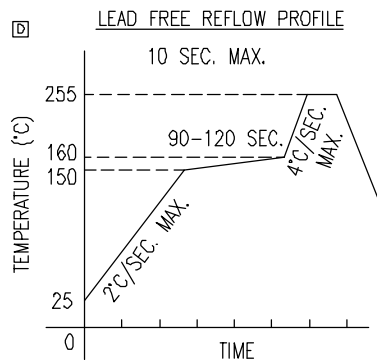
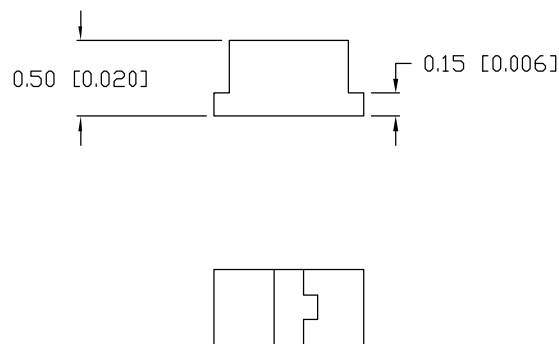
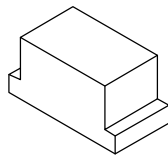
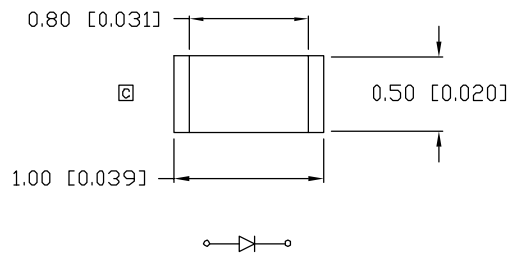


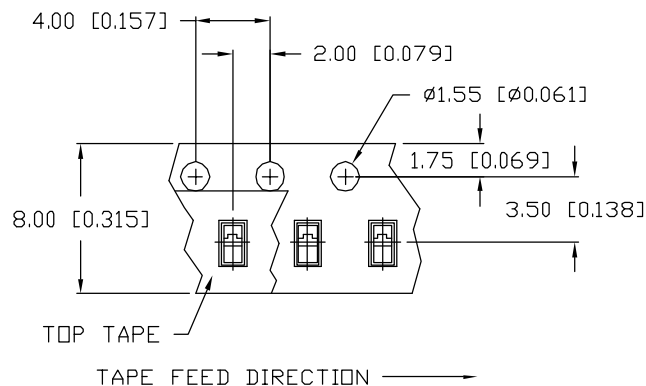
UNCONTROLLED DOCUMENT

PART NUMBER  
SML-LX0402SIC-TR

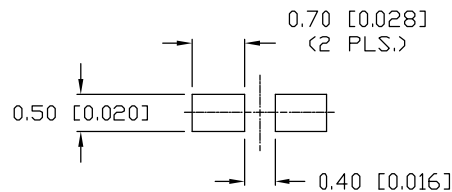
REV.  
F



TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.



RECOMMENDED SOLDER PAD LAYOUT



| REV. | E.C.N. NUMBER AND REVISION COMMENTS | DATE     |
|------|-------------------------------------|----------|
| A    | E.C.N. #10873.                      | 6.4.02   |
| B    | E.C.N. #10967.                      | 3.14.03  |
| C    | E.C.N. #10983.                      | 4.18.03  |
| D    | E.C.N. #11148.                      | 12.03.04 |
| E    | E.C.N. #11341.                      | 7.14.06  |
| F    | E.C.N. #11508.                      | 03.05.09 |

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

| PARAMETER          | MIN         | TYP | MAX | UNITS    | TEST COND            |
|--------------------|-------------|-----|-----|----------|----------------------|
| PEAK WAVELENGTH    |             | 636 |     | nm       |                      |
| FORWARD VOLTAGE    |             | 2.0 | 2.6 | $V_f$    |                      |
| REVERSE VOLTAGE    | 5.0         |     |     | $V_r$    | $I_f=100\mu\text{A}$ |
| AXIAL INTENSITY    |             | 140 |     | mcd      | $I_f=20\text{mA}$    |
| VIEWING ANGLE      |             | 120 |     | 2x theta |                      |
| EMITTED COLOR:     | RED         |     |     |          |                      |
| EPOXY LENS FINISH: | WATER CLEAR |     |     |          |                      |

LIMITS OF SAFE OPERATION AT 25°C

| PARAMETER             | MAX        | UNITS |
|-----------------------|------------|-------|
| PEAK FORWARD CURRENT* | 160        | mA    |
| STEADY CURRENT        | 30         | mA    |
| POWER DISSIPATION     | 170        | mW    |
| DERATE FROM 25°C      | -1.2       | mW/°C |
| OPERATING TEMP.       | -40 TO +85 | °C    |
| STORAGE TEMP.         | -40 TO +85 | °C    |

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

NOTES:

- PARTS PACKAGED IN CONDUCTIVE COVER AND CARRIER TAPE.
- THE CATHODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.



CAUTION: MOISTURE SENSITIVE DEVICE  
PER JEDEC LEVEL 3 STANDARDS

\*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

UNCONTROLLED DOCUMENT

|  |                                 |
|--|---------------------------------|
| REV.<br>F  | PART NUMBER<br>SML-LX0402SIC-TR |
| 1.0mm x 0.5mm SURFACE MOUNT LED,<br>636nm AlInGaP RED LED,<br>WATER CLEAR LENS, TAPE AND REEL. |                                 |

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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.

|                                |             |   |  |
|--------------------------------|-------------|---|--|
| <b>LUMEX</b><br>An ITW Company |             | 290 E. HELEN ROAD<br>PALATINE, IL 60067-6976<br>PHONE: +1.847.359.2790<br>US WEB: www.lumex.com<br>TW WEB: www.lumex.com.tw |  |
| DRAWN BY:<br>CT                | CHECKED BY: | APPROVED BY:  | DATE: 10.10.01<br>PAGE: 1 OF 1<br>SCALE: N/A |