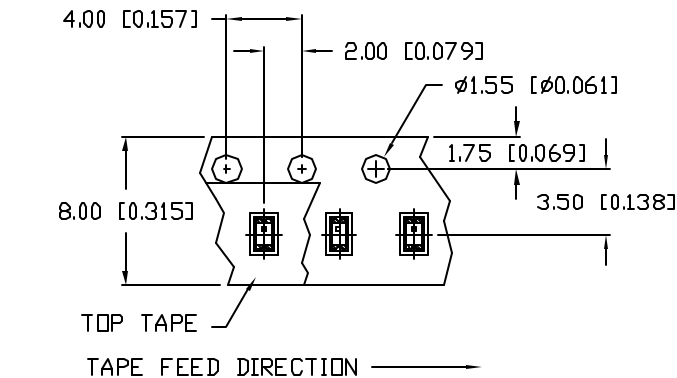
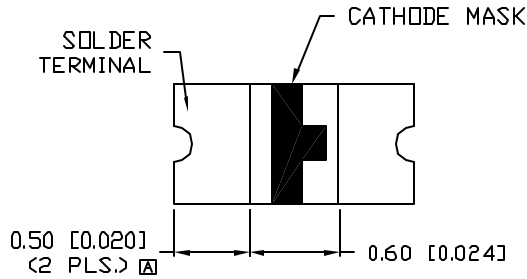
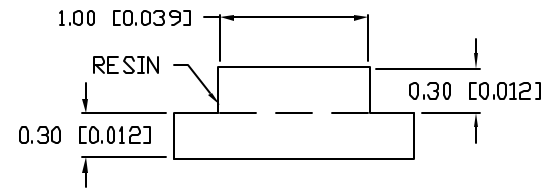
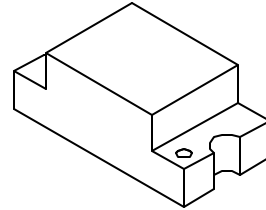
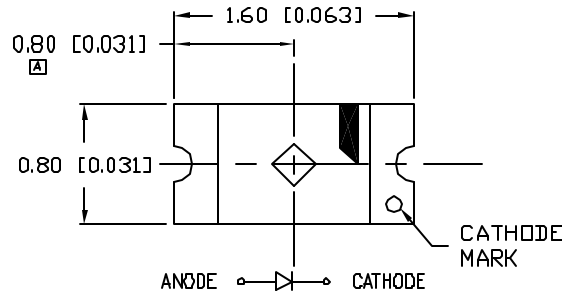
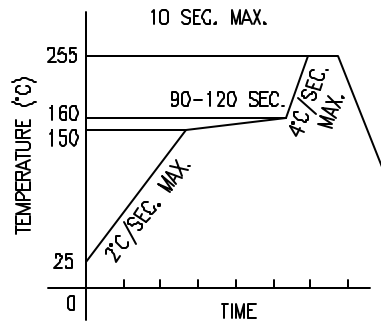


UNCONTROLLED DOCUMENT

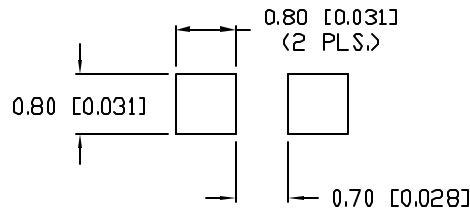


LEAD FREE REFLOW PROFILE



TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.

RECOMMENDED SOLDER PAD LAYOUT



|                  |                                     |          |
|------------------|-------------------------------------|----------|
| PART NUMBER      |                                     | REV.     |
| SML-LX0603SIW-TR |                                     | C        |
| REV.             | E.C.N. NUMBER AND REVISION COMMENTS | DATE     |
| A                | E.C.N. #10933.                      | 12.3.02  |
| B                | E.C.N. #10967.                      | 3.14.03  |
| C                | E.C.N. #11148.                      | 12.06.04 |

| 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 <sub>f</sub> |                       |
| REVERSE VOLTAGE  | 5.0                  |     |     | V <sub>r</sub> | I <sub>f</sub> =100µA |
| AXIAL INTENSITY  |                      | 60  |     | mcad           | I <sub>f</sub> =20mA  |
| VIEWING ANGLE  |                      | 140 |     | 2x theta       |                       |
| EMITTED COLOR:   | RED                  |     |     |                |                       |
| EPOXY LENS FINISH:   | MILKY WHITE DIFFUSED |     |     |                |                       |

| LIMITS OF SAFE OPERATION AT 25°C |            |       |
|----------------------------------|------------|-------|
| PARAMETER                        | MAX        | UNITS |
| PEAK FORWARD CURRENT*            | 100        | mA    |
| STEADY CURRENT                   | 30         | mA    |
| POWER DISSIPATION                | 50         | mW    |
| DERATE FROM 25°C                 | -1.2       | mW/°C |
| OPERATING TEMP.                  | -25 TO +85 | °C    |
| STORAGE TEMP.                    | -30 TO +85 | °C    |

\* t<10µs

NOTES:

1. THE CATHODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.

CAUTION: MOISTURE SENSITIVE DEVICE  
PER JEDEC LEVEL 4 STANDARDS



\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.038), 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

UNCONTROLLED DOCUMENT

|   |                  |
|---|------------------|
| REV.  | PART NUMBER      |
| C   | SML-LX0603SIW-TR |
| 1.6mm x 0.8mm PCB CHIP, SURFACE MOUNT LED,<br>636nm AlInGaP RED LED, MILKY WHITE DIFFUSED LENS. |                  |

**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:    | CHECKED BY: | APPROVED BY:  | DATE: 4.12.00              |
| ct           |             |   | PAGE: 1 OF 1<br>SCALE: N/A |