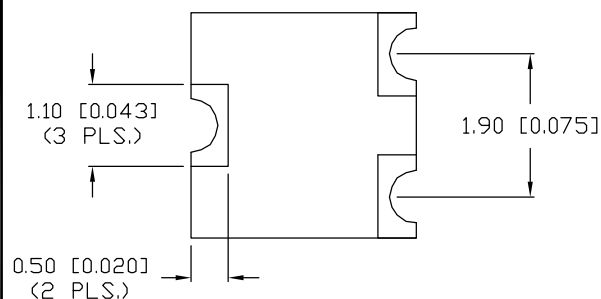
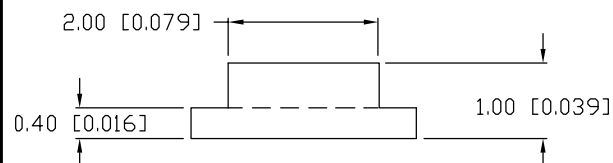
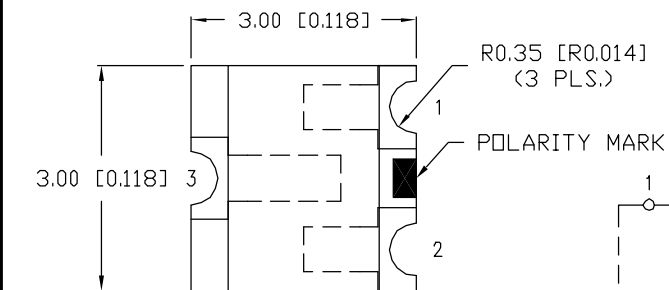
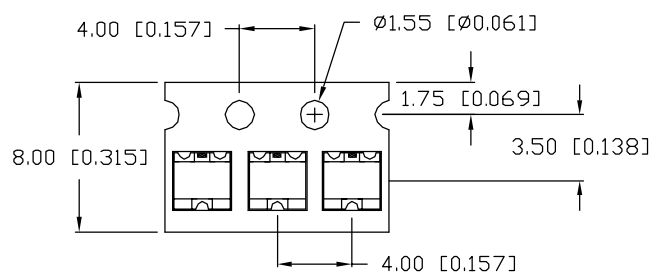


# UNCONTROLLED DOCUMENT

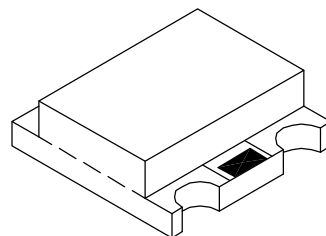
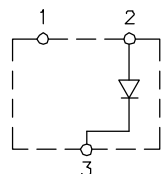


## TAPE SPEC DETAIL

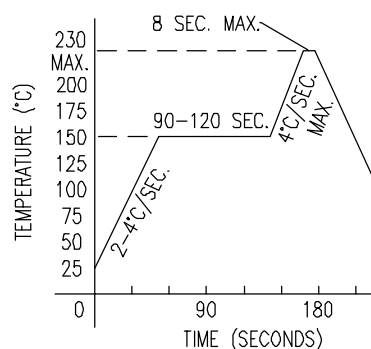


TAPE FEED DIRECTION →

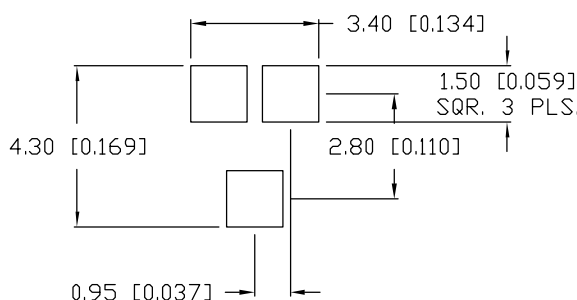
\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (0.002), LEAD LENGTH=±0.75 (±0.030). MIN= +DECIMAL PRECISION -0.00 MAX.= +0.00 -DECIMAL PRECISION



## REFLOW PROFILE



## RECOMMENDED PAD LAYOUT



PART NUMBER  
SML-LX151C-TR

REV.  
A

| REV. | E.C.N. NUMBER AND REVISION COMMENTS | DATE    |
|------|-------------------------------------|---------|
| A    | E.C.N. #10967.                      | 3.14.03 |

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         | 2.8 | $V_f$    |                      |
| REVERSE VOLTAGE    | 5.0 |             |     | $V_r$    | $I_r=100\mu\text{A}$ |
| AXIAL INTENSITY    |     | 10          |     | mcd      | $I_f=20\text{mA}$    |
| VIEWING ANGLE      |     | 140         |     | 2x theta |                      |
| EMITTED COLOR:     |     | RED         |     |          |                      |
| EPOXY LENS FINISH: |     | WATER CLEAR |     |          |                      |

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

| PARAMETER                      | MAX        | UNITS |
|--------------------------------|------------|-------|
| PEAK FORWARD CURRENT*          | 160        | mA    |
| STEADY CURRENT                 | 30         | mA    |
| POWER DISSIPATION              | 100        | mW    |
| DERATE FROM $25^\circ\text{C}$ | -1.2       | mW/°C |
| OPERATING, STORAGE TEMP.       | -30 TO +85 | °C    |

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

## NOTES:

1. THE POLARITY MARK IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.

CAUTION: MOISTURE SENSITIVE DEVICE  
PER JEDEC LEVEL 4 STANDARDS

# UNCONTROLLED DOCUMENT

REV.  
A

PART NUMBER  
SML-LX151C-TR

SOT-23 REPLACEMENT, SURFACE MOUNT LED,  
635nm RED LED,  
WATER CLEAR LENS, TAPE AND 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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|                    |             |              | PAGE: 1 OF 1  |
|                    |             |              | SCALE: N/A    |