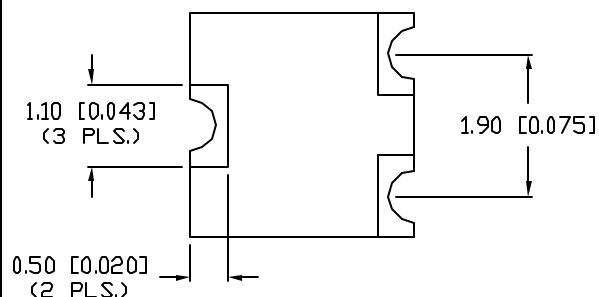
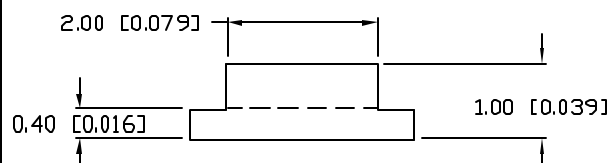
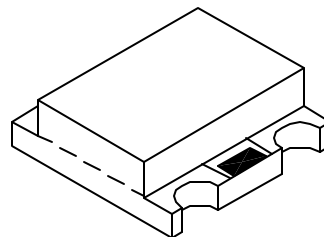
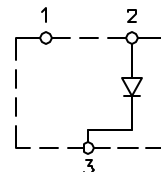
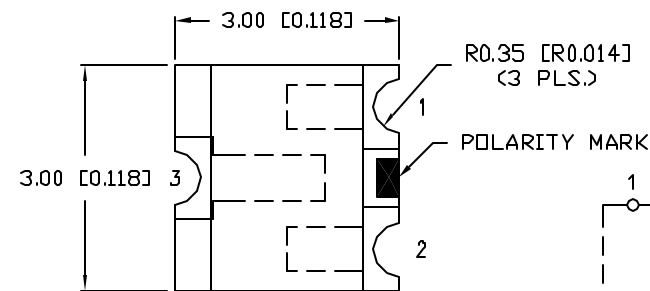
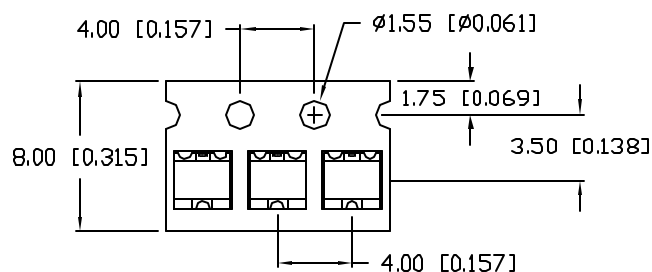


# UNCONTROLLED DOCUMENT



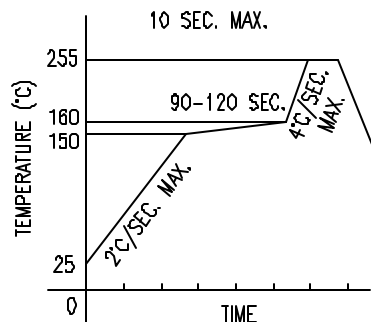
## TAPE SPEC DETAIL



TAPE FEED DIRECTION →

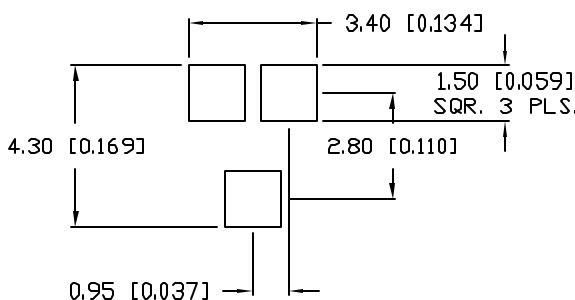
\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005), LEAD SIZE=±0.05 (0.002), LEAD LENGTH=±0.75 (±0.030), MIN= +DECIMAL PRECISION MAX= +0.00 -DECIMAL PRECISION

## LEAD FREE REFLOW PROFILE



TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX. □ OPERATING, STORAGE TEMP.

## RECOMMENDED PAD LAYOUT



## NOTES:

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

CAUTION: MOISTURE SENSITIVE DEVICE  
PER JEDEC LEVEL 4 STANDARDS

# UNCONTROLLED DOCUMENT

| REV.                                                                                                 | PART NUMBER    |
|------------------------------------------------------------------------------------------------------|----------------|
| D                                                                                                    | SML-LX15Soc-TR |
| SOT-23 REPLACEMENT, SURFACE MOUNT LED,<br>610nm SUPER ORANGE LED,<br>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.

|                                                                                                                                             |                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| <b>LUMEX</b><br>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>JC                                                                                                                             | CHECKED BY:<br>APPROVED BY:<br>DATE: 11.28.06<br>PAGE: 1 OF 1<br>SCALE: N/A |

| PART NUMBER    |                                     | REV.     |
|----------------|-------------------------------------|----------|
| SML-LX15Soc-TR |                                     | D        |
| REV.           | E.C.N. NUMBER AND REVISION COMMENTS | DATE     |
| A              | E.C.N. #10967.                      | 3.14.03  |
| B              | E.C.N. #11010.                      | 7.3.03   |
| C              | E.C.N. #11148.                      | 11.30.05 |
| D              | E.C.N. #11361.                      | 11.28.06 |

## ELECTRO-OPTICAL CHARACTERISTICS TA=25°C If=20mA

| PARAMETER          | MIN         | TYP | MAX | UNITS    | TEST COND |
|--------------------|-------------|-----|-----|----------|-----------|
| PEAK WAVELENGTH    |             | 610 |     | nm       |           |
| FORWARD VOLTAGE    |             | 2.0 | 2.5 | Vf       |           |
| REVERSE VOLTAGE    | 5.0         |     |     | Vr       | If=100µA  |
| AXIAL INTENSITY    |             | 60  |     | mcd      | If=20mA   |
| VIEWING ANGLE      |             | 140 |     | 2x theta |           |
| EMITTED COLOR:     | ORANGE      |     |     |          |           |
| 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        | 100        | mW    |
| DERATE FROM 25°C         | -1.2       | mW/°C |
| OPERATING, STORAGE TEMP. | -40 TO +85 | °C    |

\* t<10µs