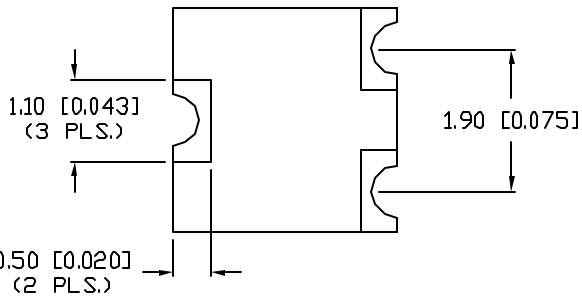
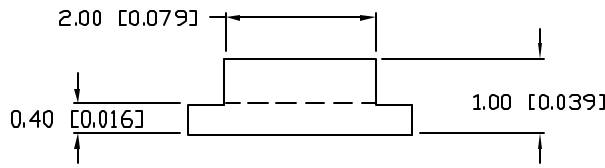
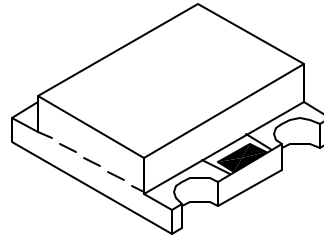
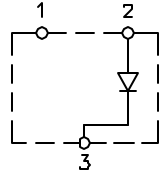
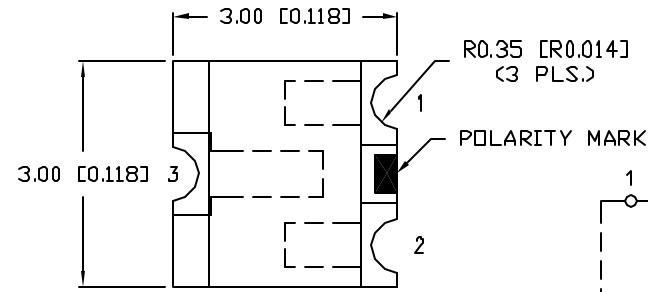
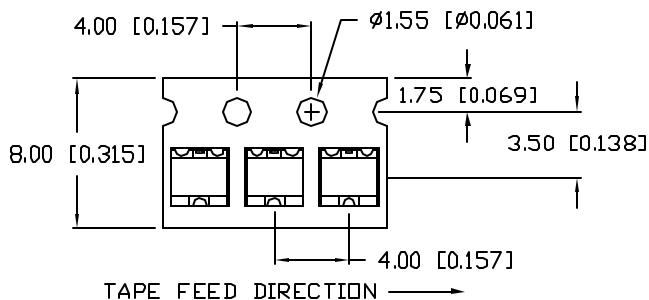


UNCONTROLLED DOCUMENT

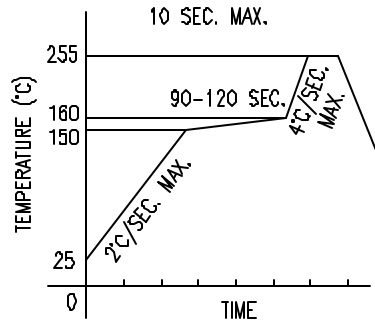


TAPE SPEC DETAIL



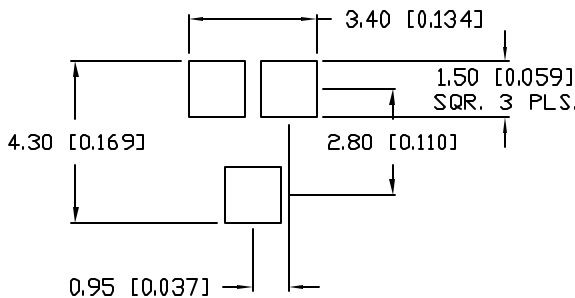
*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), XX=±0.5 (±0.020), XXX=±0.25 (±0.010), XXXX=±0.127 (±0.005), LEAD SIZE=±0.05 (0.002), LEAD LENGTH=±0.75 (±0.030), MIN.= +DECIMAL PRECISION -0.00, MAX.= +0.00 -DECIMAL PRECISION

LEAD FREE REFLOW PROFILE



TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.

RECOMMENDED PAD LAYOUT



PART NUMBER
SML-LX15USBC-TR

REV.
C

| 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 |

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

| PARAMETER | MIN | TYP | MAX | UNITS | TEST COND |
|--------------------|-------------|-----|-----|----------------|-----------------------|
| PEAK WAVELENGTH | | 470 | | nm | |
| FORWARD VOLTAGE | | 3.5 | 4.0 | V _f | |
| REVERSE VOLTAGE | 5.0 | | | V _r | I _f =100µA |
| AXIAL INTENSITY | | 120 | | mcd | I _f =20mA |
| VIEWING ANGLE | | 140 | | 2x theta | |
| EMITTED COLOR: | BLUE | | | | |
| EPOXY LENS FINISH: | WATER CLEAR | | | | |

LIMITS OF SAFE OPERATION AT 25°C

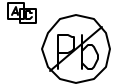
| PARAMETER | MAX | UNITS |
|--------------------------|------------|-------|
| PEAK FORWARD CURRENT* | 100 | mA |
| STEADY CURRENT | 30 | mA |
| POWER DISSIPATION | 98 | mW |
| DERATE FROM 25°C | -2.0 | mW/°C |
| OPERATING, STORAGE TEMP. | -30 TO +85 | °C |

* t<10µS

NOTES:

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

CAUTION: MOISTURE SENSITIVE DEVICE
PER JEDEC LEVEL 4 STANDARDS



CAUTION: STATIC SENSITIVE DEVICE
FOLLOW PROPER E.S.D. HANDLING PROCEDURES
WHEN WORKING WITH THIS PART.

UNCONTROLLED DOCUMENT

| REV. | PART NUMBER |
|--|-----------------|
| C | SML-LX15USBC-TR |
| SOT-23 REPLACEMENT, SURFACE MOUNT LED, 470nm ULTRA SUPER BLUE LED, WATER CLEAR LENS, TAPE AND REEL | |

CONFIDENTIAL INFORMATION
THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.

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.

| | | | |
|-----------|-------------|---|----------------------------|
| | | 290 E. HELEN ROAD PALATINE, IL 60067-6976 PHONE: +1.847.359.2790 US WEB: www.lumex.com TW WEB: www.lumex.com.tw | |
| DRAWN BY: | CHECKED BY: | APPROVED BY: | DATE: 4.26.01 |
| SS/BC | | | PAGE: 1 OF 1 SCALE: N/A |