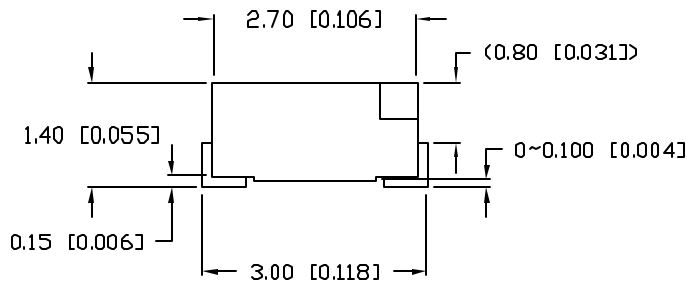
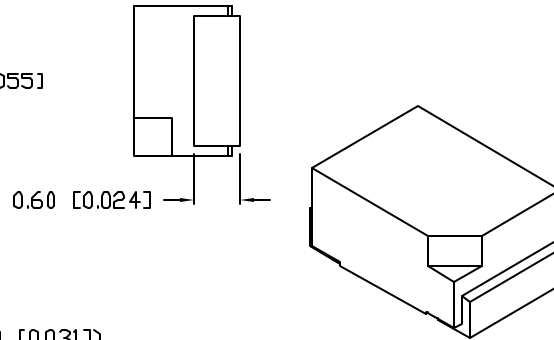
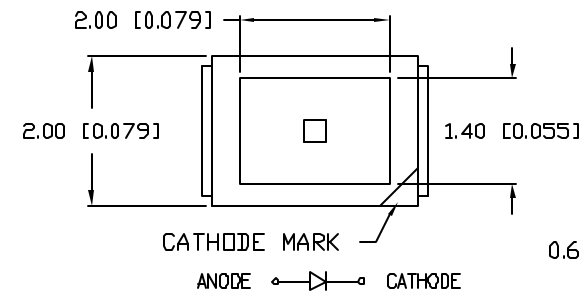


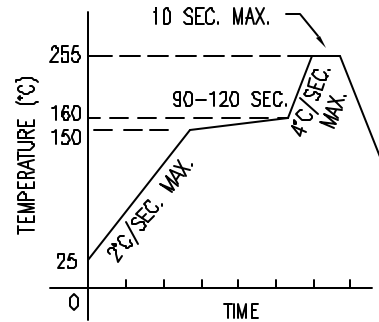
UNCONTROLLED DOCUMENT

PART NUMBER
SML-LX23SOC-TR

REV.
B

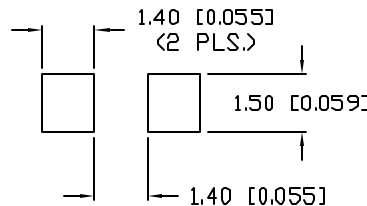


LEAD FREE REFLOW PROFILE



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. #10967. | 3.14.03 |
| B | E.C.N. #11148. | 2.8.05 |

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

| PARAMETER | MIN | TYP | MAX | UNITS | TEST COND |
|--------------------|-------------|-----|-----|----------|----------------------|
| PEAK WAVELENGTH | | 610 | | nm | |
| FORWARD VOLTAGE | | 2.0 | 2.5 | V_f | |
| REVERSE VOLTAGE | 5.0 | | | V_r | $I_r=100\mu\text{A}$ |
| AXIAL INTENSITY | | 300 | | mcad | $I_f=20\text{mA}$ |
| VIEWING ANGLE | | 90 | | 2x theta | |
| EMITTED COLOR: | ORANGE | | | | |
| EPOXY LENS FINISH: | WATER CLEAR | | | | |

LIMITS OF SAFE OPERATION AT 25°C PER CHIP

| 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 TEMP. | -25 TO +80 | °C |
| STORAGE TEMP. | -30 TO +85 | °C |

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

NOTES:

- THE CATHODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.

CAUTION: MOISTURE SENSITIVE DEVICE
PER JEDEC LEVEL 4 STANDARDS

UNCONTROLLED DOCUMENT

*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

| REV. | PART NUMBER |
|------|----------------|
| B | SML-LX23SOC-TR |

2mm x 3mm SURFACE MOUNT WITH REFLECTOR,
610nm SUPER ORANGE LED, WATER CLEAR 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: BC | CHECKED BY: | APPROVED BY: | DATE: 12.21.00 |
| | | | PAGE: 1 OF 1 |
| | | | SCALE: N/A |