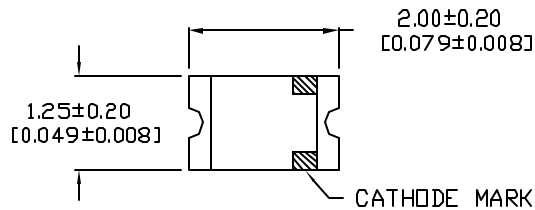


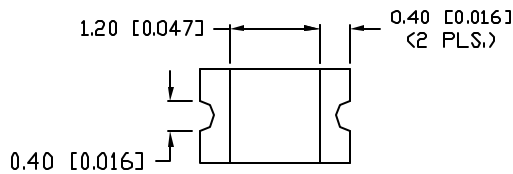
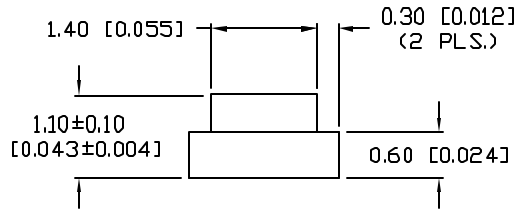
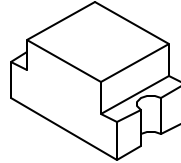
UNCONTROLLED DOCUMENT

| | | |
|-------------------|-------------------------------------|---------|
| PART NUMBER | | REV. |
| SML-LX0805UPGC-TR | | B |
| REV. | E.C.N. NUMBER AND REVISION COMMENTS | DATE |
| A | E.C.N. #10862. | 5.9.02 |
| B | E.C.N. #10967. | 3.14.03 |
| C | E.C.N. #11248. | 8.9.05 |

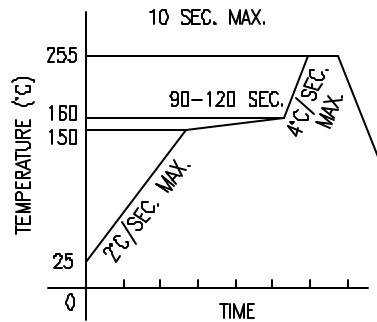


ANODE CATHODE

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



LEAD FREE REFLOW PROFILE



TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.

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

| PARAMETER | MIN | TYP | MAX | UNITS | TEST COND |
|--------------------|-------------|-----|-----|----------|----------------------|
| PEAK WAVELENGTH | | 525 | | nm | |
| FORWARD VOLTAGE | | 3.5 | 4.0 | V_f | |
| REVERSE VOLTAGE | 5.0 | | | V_r | $I_f=100\mu\text{A}$ |
| AXIAL INTENSITY | | 45 | | md | $I_f=20\text{mA}$ |
| VIEWING ANGLE | | 140 | | 2x theta | |
| EMITTED COLOR: | GREEN | | | | |
| EPOXY LENS FINISH: | WATER CLEAR | | | | |

LIMITS OF SAFE OPERATION AT 25°C

| PARAMETER | MAX | UNITS |
|---|------------|-------|
| PEAK FORWARD CURRENT* | 90 | mA |
| STEADY CURRENT | 30 | mA |
| POWER DISSIPATION | 100 | mW |
| DERATE FROM 25°C | -1.2 | mW/°C |
| <input checked="" type="checkbox"/> OPERATING TEMP. | -40 TO +85 | °C |
| <input checked="" type="checkbox"/> STORAGE TEMP. | -40 TO +85 | °C |

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

NOTES:

- THE CATHODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.

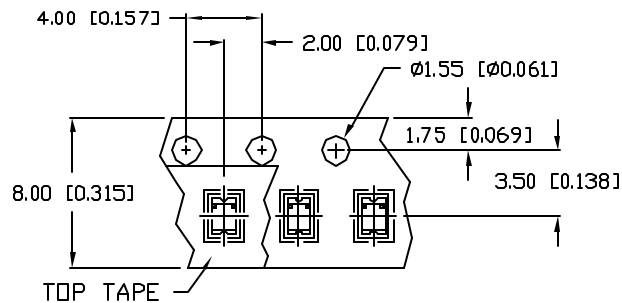
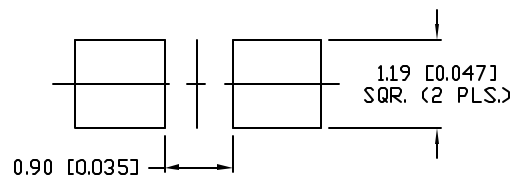
CAUTION: MOISTURE SENSITIVE DEVICE
PER JEDEC LEVEL 4 STANDARDS



UNCONTROLLED DOCUMENT

*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.038), 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 MAX= +0.00 -DECIMAL PRECISION

RECOMMENDED SOLDER PAD LAYOUT



TOP TAPE
TAPE FEED DIRECTION →

| | |
|---|-------------------|
| REV. | PART NUMBER |
| B | SML-LX0805UPGC-TR |
| 2.0mm x 1.25mm PCB SURFACE MOUNT, TAPE AND REEL, 525nm ULTRA PURE GREEN, 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.

| | | |
|----------------|-------------|---|
| | | 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: |
| BC | | |
| DATE: 11.13.00 | | PAGE: 1 OF 1 |
| SCALE: N/A | | |