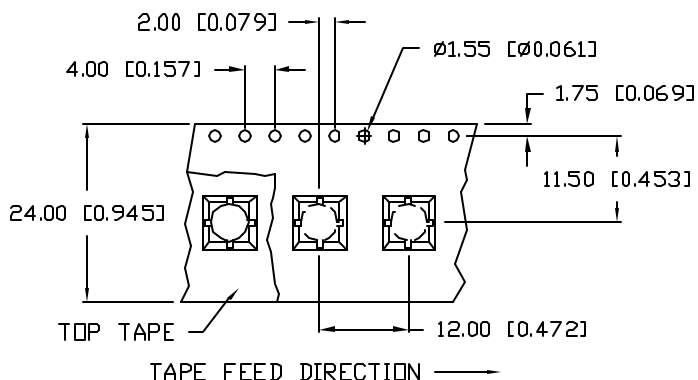
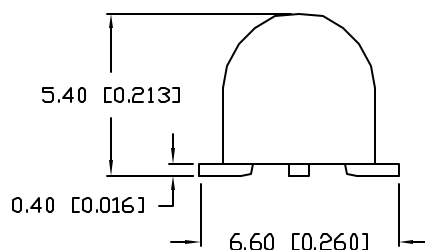
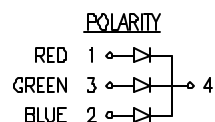
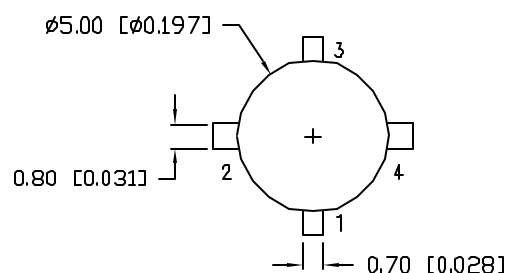
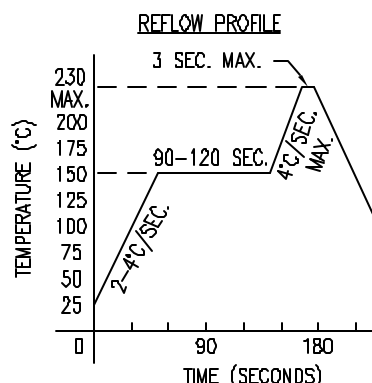
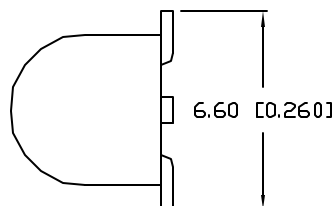


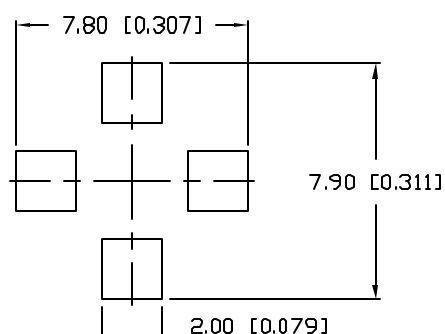
UNCONTROLLED DOCUMENT



\*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).



**RECOMMENDED SOLDER PAD LAYOUT**



PART NUMBER  
SML-LXL505SISUGUSB

REV.  
A

| REV. | E.C.N. NUMBER AND REVISION COMMENTS | DATE    |
|------|-------------------------------------|---------|
| A    | E.C.N. #11171.                      | 9.23.04 |

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

| PARAMETER                      | RED | GREEN | BLUE | UNITS          | TEST COND            |
|--------------------------------|-----|-------|------|----------------|----------------------|
| PEAK WAVELENGTH                | 636 | 574   | 470  | nm             |                      |
| FORWARD VOLTAGE (TYP.)         | 2.0 | 2.2   | 3.5  | nm             |                      |
| FORWARD VOLTAGE (MAX.)         | 2.6 | 2.6   | 4.0  | V <sub>f</sub> |                      |
| REVERSE VOLTAGE                | 5.0 | 5.0   | 5.0  | V <sub>r</sub> | $I_r=100\mu\text{A}$ |
| AXIAL INTENSITY                | 800 | 500   | 800  | mcd            | $I_f=20\text{mA}$    |
| VIEWING ANGLE                  | 30  | 30    | 30   | 2x theta       |                      |
| FILED POSITION:                | 1   | 3     | 2    |                |                      |
| EPOXY LENS FINISH: WATER CLEAR |     |       |      |                |                      |

LIMITS OF SAFE OPERATION AT 25°C PER CHIP

| PARAMETER                | COLORS  | MAX         | UNITS |
|--------------------------|---------|-------------|-------|
| PEAK FORWARD CURRENT*    | {R/G/B} | 150/150/200 | mA    |
| STEADY CURRENT           | {R/G/B} | 30/25/30    | mA    |
| POWER DISSIPATION        |         | 105         | mW    |
| DERATE FROM 25°C         |         | -1.2        | mW/°C |
| OPERATING, STORAGE TEMP. |         | -40 TO +85  | °C    |

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

**NOTES:**

1. THE CATHODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.
2. 1,000 PCS. PER REEL.

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

UNCONTROLLED DOCUMENT

REV.  
A

PART NUMBER  
SML-LXL505SISUGUSB

T-5mm (T-1 3/4) SURFACE MOUNT DOMED LED, 4 LEADED,  
FULL COLOR RGB, 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

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