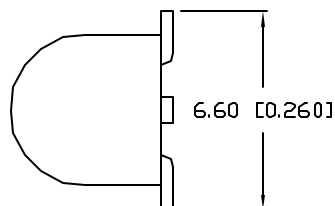
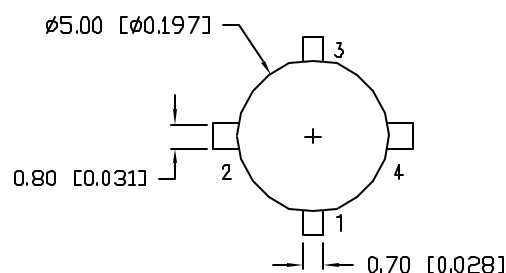
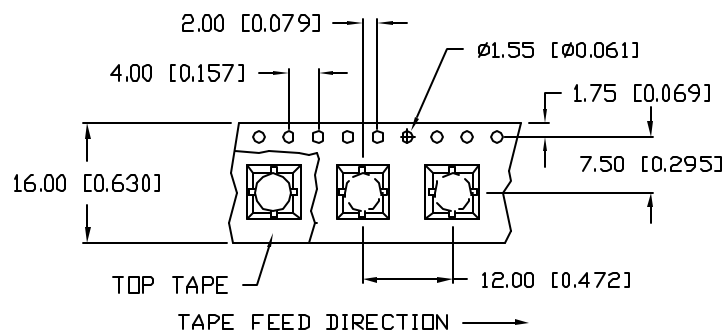
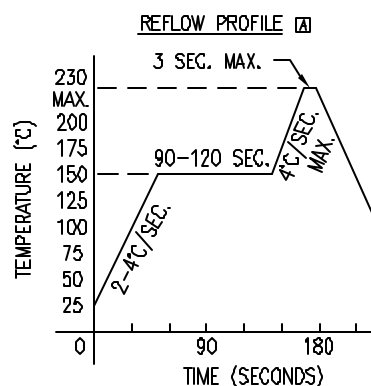
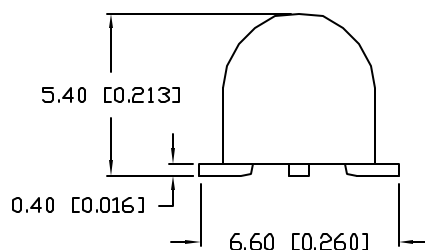
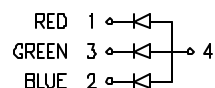


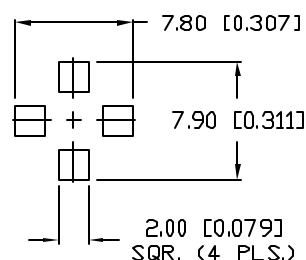
UNCONTROLLED DOCUMENT



POLARITY



RECOMMENDED SOLDER PAD LAYOUT



| PART NUMBER        |                                     | REV.    |
|--------------------|-------------------------------------|---------|
| SML-LXL505SRUPUBCA |                                     | B       |
| REV.               | E.C.N. NUMBER AND REVISION COMMENTS | DATE    |
| A                  | E.C.N. #10966.                      | 3.11.03 |
| B                  | 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        | 660 | 525   | 470  | nm             |                      |
| FORWARD VOLTAGE (TYP.) | 2.0 | 3.5   | 3.5  | nm             |                      |
| FORWARD VOLTAGE (MAX.) | 2.5 | 4.0   | 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        | 150 | 600   | 300  | mcd            | $I_f=20\text{mA}$    |
| VIEWING ANGLE          | 30  | 30    | 30   | 2x theta       |                      |
| LED 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 ANODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.
2. 800 PCS. PER REEL.

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

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.=+0.00 PRECISION -0.00, MAX.=+0.00 PRECISION -0.00

| REV. | PART NUMBER        |
|------|--------------------|
| B    | SML-LXL505SRUPUBCA |

T-5mm (T-1 3/4) SURFACE MOUNT DOMED LED, 4 LEADED,  
FULL COLOR RGB, WATER CLEAR LENS COMMON ANODE.

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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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| GB        |             |              | PAGE: 1 OF 1   |
|           |             |              | SCALE: N/A     |