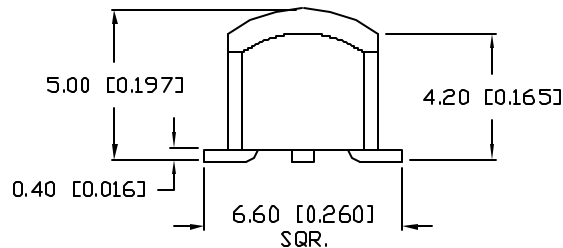
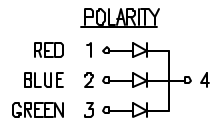
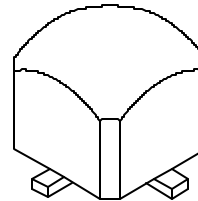
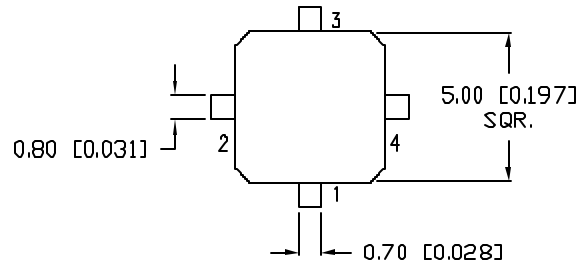
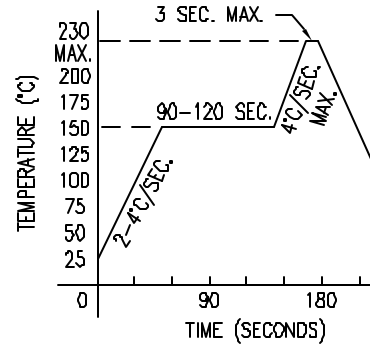


| REV. | E.C.N. NUMBER AND REVISION COMMENTS | DATE    |
|------|-------------------------------------|---------|
| A    | E.C.N. #10770.                      | 7.23.01 |
| B    | E.C.N. #10789.                      | 9.27.01 |
| C    | E.C.N. #10966                       | 3.11.03 |



REFLOW PROFILE



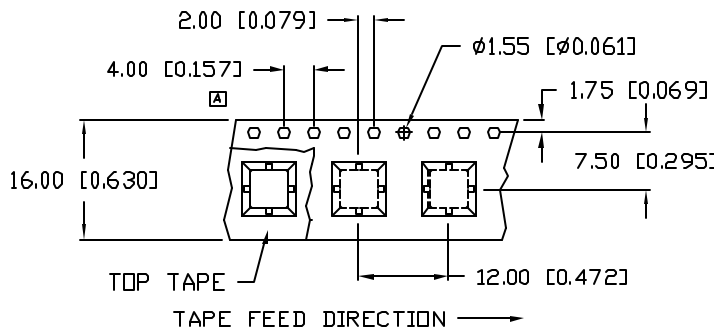
ELECTRO-OPTICAL CHARACTERISTICS  $T_A=25^\circ\text{C}$   $I_f=20\text{mA}$

| PARAMETER                               | RED | GREEN | BLUE | UNITS          | TEST COND            |
|---|-----|-------|------|----------------|----------------------|
| PEAK WAVELENGTH                         | 660 | 565   | 430  | nm             |                      |
| FORWARD VOLTAGE (TYP.)                  | 1.7 | 2.2   | 4.5  | V <sub>f</sub> |                      |
| FORWARD VOLTAGE (MAX.)                  | 2.2 | 2.6   | 5.5  | V <sub>f</sub> |                      |
| REVERSE VOLTAGE                         | 5.0 | 5.0   | 5.0  | V <sub>r</sub> | $I_f=100\mu\text{A}$ |
| AXIAL INTENSITY                         | 9   | 9     | 8    | mcd            | $I_f=20\text{mA}$    |
| VIEWING ANGLE                           | 120 | 120   | 120  | 2x theta       |                      |
| LED POSITION:                           | 1   | 2     | 3    |                |                      |
| EPOXY LENS FINISH: MILKY WHITE DIFFUSED |     |       |      |                |                      |

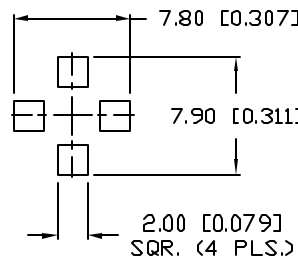
LIMITS OF SAFE OPERATION AT 25°C PER CHIP

| 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    |

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



RECOMMENDED SOLDER PAD LAYOUT



NOTES:

1. THE CATHODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.
2. 500 PCS. PER REEL.

\*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.=<sup>+DECIMAL PRECISION</sup><sub>-0.00</sub>, MAX.=<sup>+0.00</sup><sub>-DECIMAL PRECISION</sub>

| REV. | PART NUMBER        |
|------|--------------------|
| B    | SML-LXL5550SRSGSBW |

T-5mm (T-1 3/4) SURFACE MOUNT LED,  
5mm SQUARE WITH DOME, 4 LEADED,  
FULL RGB COLOR, MILKY WHITE DIFFUSED LENS.

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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:<br>BC | CHECKED BY: | APPROVED BY: | DATE: 1.17.01<br>PAGE: 1 OF 1<br>SCALE: N/A |
|-----------------|-------------|--------------|---|