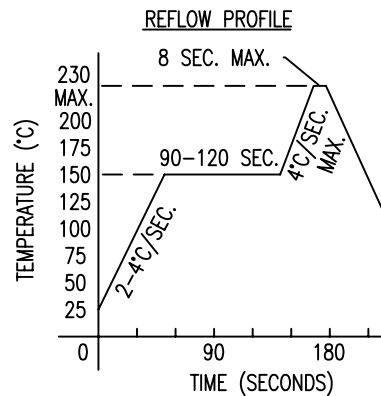
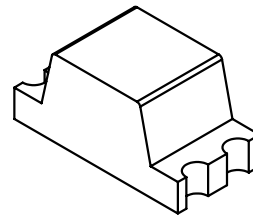
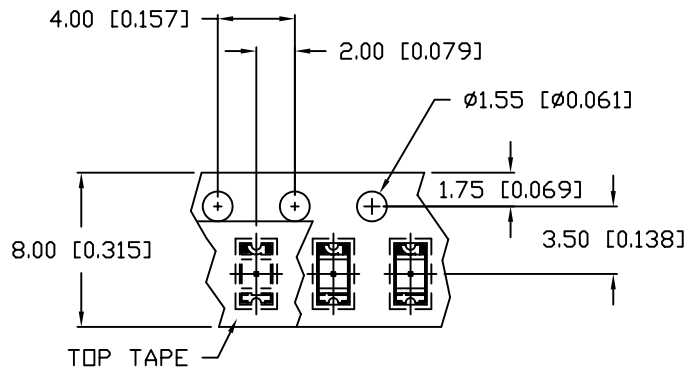
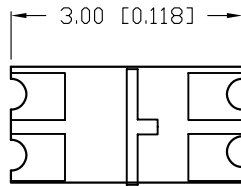
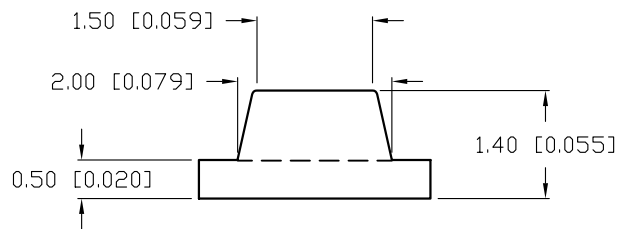
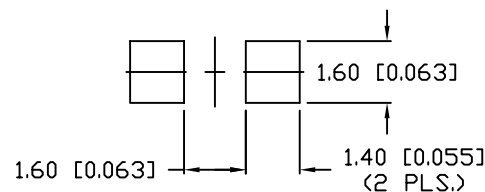


RED CATHODE  RED ANODE  
IR ANODE  IR CATHODE



## RECOMMENDED SOLDER PAD LAYOUT

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

| PARAMETER              | MIN         | TYP       | MAX     | UNITS    | TEST COND            |
|------------------------|-------------|-----------|---------|----------|----------------------|
| PEAK WAVELENGTH        |             | 890 (IR)  |         | nm       |                      |
|                        |             | 660 (RED) |         | nm       |                      |
| FORWARD VOLTAGE (IR/R) |             | 1.3/1.7   | 1.6/2.2 | $V_f$    |                      |
| REVERSE VOLTAGE        | 5.0         |           |         | $V_r$    | $I_r=100\mu\text{A}$ |
| AXIAL INTENSITY (R)    |             | 11.5      |         | mcd      | $I_f=20\text{mA}$    |
| (IR)                   |             | 10.0      |         | mW/Sr    | $I_f=20\text{mA}$    |
| VIEWING ANGLE          |             | 120       |         | 2x theta |                      |
| EMITTED COLOR:         | RED/IR      |           |         |          |                      |
| EPOXY LENS FINISH:     | WATER CLEAR |           |         |          |                      |

LIMITS OF SAFE OPERATION AT  $25^\circ\text{C}$  PER CHIP

| PARAMETER                      | COLORS | MAX        | UNITS                      |
|--------------------------------|--------|------------|----------------------------|
| PEAK FORWARD CURRENT*          | (IR/R) | 1200/155   | mA                         |
| STEADY CURRENT                 | (IR/R) | 40/30      | mA                         |
| POWER DISSIPATION              |        | 100        | mW                         |
| DERATE FROM $25^\circ\text{C}$ |        | -1.2       | $\text{mW}/^\circ\text{C}$ |
| OPERATING TEMP.                |        | -40 TO +85 | $^\circ\text{C}$           |
| STORAGE TEMP.                  |        | -40 TO +85 | $^\circ\text{C}$           |

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

## NOTES:

1. THE POLARITY MARK IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.

CAUTION: MOISTURE SENSITIVE DEVICE  
PER JEDEC LEVEL 4 STANDARDS

\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE:  $X=\pm 1$  ( $\pm 0.039$ ),  $X.X=\pm 0.5$  ( $\pm 0.020$ ),  $X.XX=\pm 0.25$  ( $\pm 0.010$ ),  $X.XXX=\pm 0.127$  ( $\pm 0.005$ ). LEAD SIZE= $\pm 0.05$  (0.002), LEAD LENGTH= $\pm 0.75$  ( $\pm 0.030$ ). MIN=  $\begin{matrix} +\text{DECIMAL PRECISION} \\ -0.00 \end{matrix}$  MAX.=  $\begin{matrix} +0.00 \\ -\text{DECIMAL PRECISION} \end{matrix}$

REV.

PART NUMBER

SML-LX1106SRDLC-TR

3mm x 1.5mm SURFACE MOUNT LED,  
660nm RED / 890nm INFRARED LED,  
WATER CLEAR LENS, TAPE AND REEL.

## 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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SCALE: N/A