



We Tame Photons to Work for You!



Products > High Power LEDs > SuperBeamLED



Features / Options

- ▶ State-of-the-Art, High Brightness Chip Technology
- ▶ Choice of Colors and Lens Finishes
- ▶ Maintenance Free Long Life

Applications / Uses

- ▶ Flashlights
- ▶ Illuminating Signs/Artwork
- ▶ Decorative Lighting
- ▶ Backlighting

| Part Number: | Brightness | Dice Material | Emitted Color | Peak Wavelength | Epoxy Lens | Operating Typ Vf (V) | Intensity Typ, mcd @ 20 mA | View Angle 2x Theta | | |
|-------------------|------------|---------------|---------------|-----------------|------------|----------------------|----------------------------|---------------------|--|---|
| SSL-LX100T123SIC | High | AlInGaP | Red | 630 | Clear | 2.0 | 35 lm | 25 | | — |
| SSL-LX100T123SYC | High | AlInGaP | Yellow | 590 | Clear | 2.0 | 35 lm | 25 | | — |
| SSL-LX100T123UPGC | High | InGaN | Green | 525 | Clear | 3.5 | 55 lm | 25 | | — |

UNCONTROLLED DOCUMENT

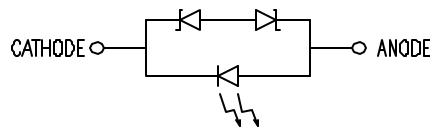
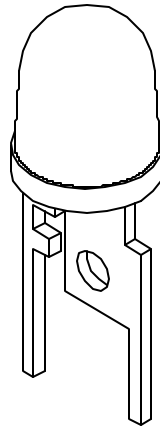
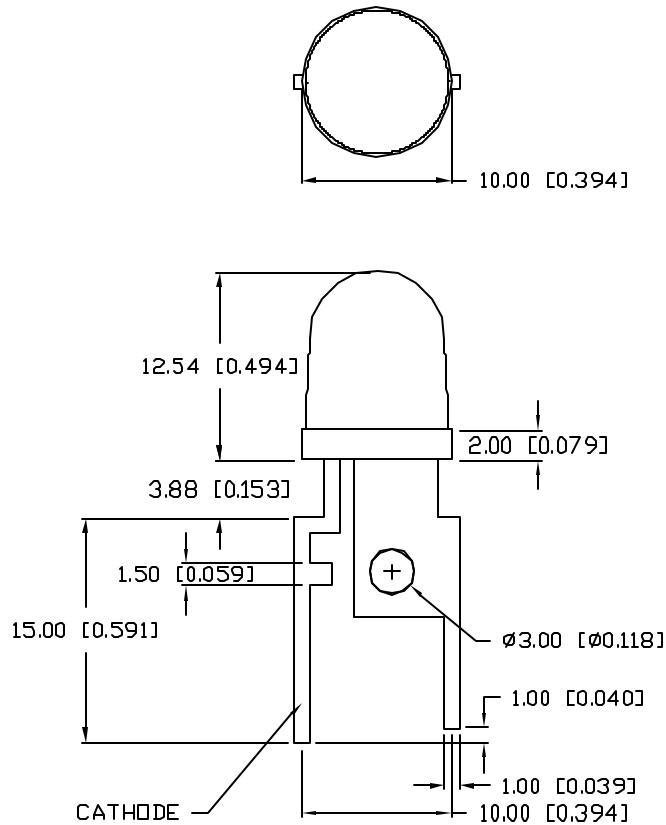
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PART NUMBER

REV.

SSL-LX100T123SIC

PRELIMINARY IN P/N DIR



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

| PARAMETER | SYMBOL | MIN | TYP | MAX | UNITS | TEST COND |
|--------------------|--------|-----|-----|-----|------------|---------------------|
| PEAK WAVELENGTH | | | 636 | | nm | |
| FORWARD VOLTAGE | V_f | | 2.0 | 3.0 | V | $I_f=350\text{mA}$ |
| REVERSE VOLTAGE | V_r | 5 | | | V | $I_r=10\mu\text{A}$ |
| AXIAL INTENSITY | I_v | 27 | | 45 | lm | $I_f=350\text{mA}$ |
| VIEWING ANGLE | | | 25 | | $2x$ theta | |
| EMITTED COLOR: | RED | | | | | |
| EPOXY LENS FINISH: | CLEAR | | | | | |

LIMITS OF SAFE OPERATION AT 25°C

| PARAMETER | MAX | UNITS |
|----------------------------------|------------|------------------------|
| PEAK FORWARD CURRENT* | 500 | mA |
| STEADY CURRENT | 350 | mA |
| POWER DISSIPATION | 1.4 | W |
| DERATE FROM 25°C | -1.2 | mW/ $^{\circ}\text{C}$ |
| OPERATING, STORAGE TEMP. | -40 TO +85 | $^{\circ}\text{C}$ |
| SOLDERING TEMP. | 260 | $^{\circ}\text{C}$ |
| 2.0mm FROM BODY | 3 | SEC |

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

*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} -0.00, MAX= ^{+0.00} -DECIMAL PRECISION

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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.

ø10.00mm 1 WATT THROUGH HOLE, HIGH POWER LED,
636nm AlInGaP RED LED, WATER CLEAR LENS.

DRAWN BY:

JN

CHECKED BY:

APPROVED BY:

DATE: 12.19.07

PAGE: 1 OF 1

SCALE: N/A