



We Tame Photons to Work for You!



Products > LEDs > Thru-Hole > Round > 3mm > Standard



Features / Options

- ▶ State-of-the-Art, High Brightness Chip Technology
- ▶ Choice of Colors and Lens Finishes
- ▶ Lead Frame / Lens Casting Reliability
- ▶ Easy-to-Solder Leads, Tin Finish
- ▶ Available Bulk or on Tape and Reel
- ▶ Lead Trimming and Forming Available
- ▶ Custom Shapes, Easily Tooled, Low Minimum

Applications / Uses

- ▶ Board or Panel Indication or Illumination
- ▶ Annunciator and Control Panels
- ▶ Telecom Switches and Central Station Equipment
- ▶ Large Panel Indicators

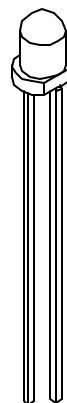
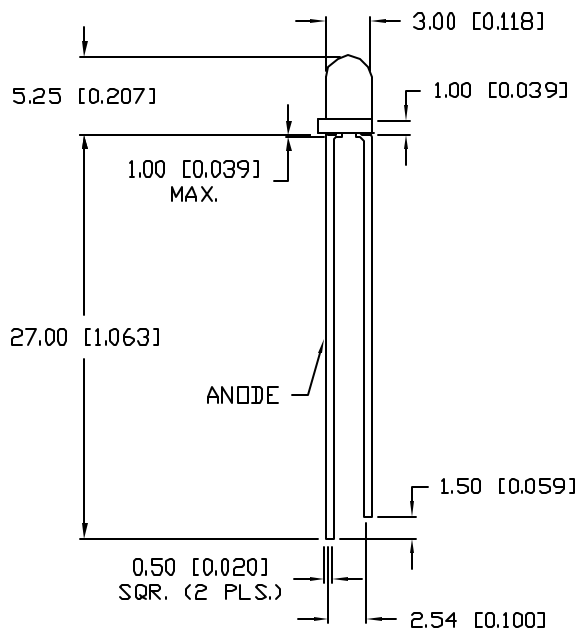
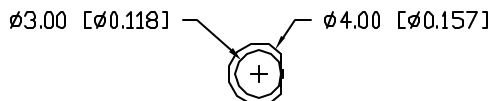
| Part Number: | Brightness | Dice Material | Emitted Color | Peak Wavelength | Epoxy Lens | Operating Typ Vf (V) | Intensity Typ, mcd @ 20 mA | View Angle 2x Theta | | |
|--------------|------------|---------------|---------------|-----------------|--------------|----------------------|----------------------------|---------------------|--|---|
| SSL-LX3054AC | STANDARD | GaAsP | Amber | 605 | Clear | 2.1 | 80 | 30 | | — |
| SSL-LX3054AD | STANDARD | GaAsP | Amber | 605 | Diffused | 2.1 | 30 | 60 | | — |
| SSL-LX3054AT | HIGH | AllnGaP | Amber | 610 | Color Tinted | 2.1 | 80 | 30 | | — |
| SSL-LX3054GC | STANDARD | GaP | Green | 565 | Clear | 2.1 | 50 | 30 | | — |
| SSL-LX3054GD | STANDARD | GaP | Green | 565 | Diffused | 2.1 | 12 | 60 | | — |
| SSL-LX3054GT | STANDARD | GaP | Green | 565 | Color Tinted | 2.1 | 50 | 30 | | — |
| SSL-LX3054HC | STANDARD | GaP | Red | 700 | Clear | 2.0 | 30 | 30 | | — |
| SSL-LX3054HD | STANDARD | GaP | Red | 700 | Diffused | 2.0 | 3 | 60 | | — |
| SSL-LX3054IC | STANDARD | GaAsP | Red | 635 | Clear | 2.0 | 60 | 30 | | — |
| SSL-LX3054ID | STANDARD | GaAsP | Red | 635 | Diffused | 2.0 | 40 | 60 | | — |

UNCONTROLLED DOCUMENT

PART NUMBER
SSL-LX3054ID

REV.
D

| REV. | E.C.N. NUMBER AND REVISION COMMENTS | DATE |
|------|-------------------------------------|---------|
| A | REDRAWN. | 9.1.93 |
| B | UPDATED SPECS. | 8.11.94 |
| C | UPADTED SAFE OPER SPECS. | 1.20.95 |
| D | E.C.N. #10BRDR. & REDRAWN IN 3D. | 4.16.01 |



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

| PARAMETER | MIN | TYP | MAX | UNITS | TEST COND |
|---|--------------|-----|-----|----------|----------------------|
| PEAK WAVELENGTH | | 635 | | nm | |
| FORWARD VOLTAGE | | 2.0 | 2.5 | V_f | |
| REVERSE VOLTAGE | 5.0 | | | V_r | $I_f=100\mu\text{A}$ |
| <input checked="" type="checkbox"/> AXIAL INTENSITY | | 40 | | med | $I_f=20\text{mA}$ |
| <input checked="" type="checkbox"/> VIEWING ANGLE | | 60 | | 2x theta | |
| EMITTED COLOR: | RED | | | | |
| EPOXY LENS FINISH: | RED DIFFUSED | | | | |

LIMITS OF SAFE OPERATION AT 25°C

| PARAMETER | MAX | UNITS |
|--|------------|------------------------|
| <input checked="" type="checkbox"/> PEAK FORWARD CURRENT* | 150 | mA |
| STEADY CURRENT | 30 | mA |
| <input checked="" type="checkbox"/> POWER DISSIPATION | 105 | mW |
| DERATE FROM 25°C | -1.6 | mW/ $^{\circ}\text{C}$ |
| <input checked="" type="checkbox"/> OPERATING, STORAGE TEMP. | -40 TO +85 | $^{\circ}\text{C}$ |
| <input checked="" type="checkbox"/> SOLDERING TEMP. | +260 | $^{\circ}\text{C}$ |
| <input checked="" type="checkbox"/> 2.0mm FROM BODY | | 3 SEC. MAX |

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

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

REV.
D

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T-3mm (T-1) 635nm RED LED,
RED DIFFUSED LENS.

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.

DRAWN BY:

BC

CHECKED BY:

APPROVED BY:

DATE: 8.9.94

PAGE: 1 OF 1

SCALE: N/A