



We Tame Photons to Work for You!



Products > LEDs > Thru-Hole > Round > 10mm > 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

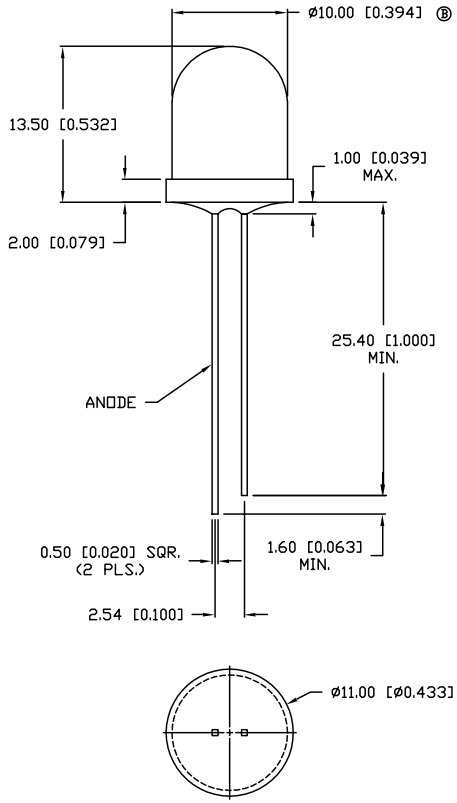
- ▶ Board or Panel Indication or Illumination
- ▶ Annunciator and Control Panels
- ▶ Telecom Switches and Central Station Equipment
- ▶ Large Panel Indicators

| 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-LX100133BID | STANDARD | GaAsP | Blinking Red | 635 | Diffused | 3 | 12 | 80 | — |
| SSL-LX100133GD | STANDARD | GaP | Green | 565 | Diffused | 2.2 | 30 | 60 | — |
| SSL-LX100133HGW | STANDARD | GaP | Red/Green | 700 | White Diffused | 2 | 4 | 60 | — |
| SSL-LX100133IC | STANDARD | GaAsP | Red | 635 | Clear | 2.0 | 40 | 30 | — |
| SSL-LX100133ID | STANDARD | GaAsP | Red | 635 | Diffused | 2.0 | 40 | 60 | — |
| SSL-LX100133SBC/A | STANDARD | SiC | Blue | 430 | Clear | 3.5 | 150 | 30 | — |
| SSL-LX100133SGC | STANDARD | GaP | Green | 565 | Clear | 2.1 | 120 | 30 | — |
| SSL-LX100133SGD | STANDARD | GaP | Green | 565 | Diffused | 2.2 | 45 | 60 | — |
| SSL-LX100133SIC | HIGH | AllnGaP | Red | 636 | Clear | 2.0 | 3200 | 30 | — |
| SSL-LX100133SID | HIGH | AllnGaP | Red | 636 | Diffused | 2.0 | 550 | 60 | — |

| | | | | | | | | | | | |
|-------------------|--|----------|---------|--------|-----|----------|-----|------|----|--|---|
| SSL-LX100133SOC | | HIGH | AlInGaP | Orange | 610 | Clear | 1.8 | 3200 | 30 | | — |
| SSL-LX100133SOD | | HIGH | AlInGaP | Orange | 620 | Diffused | 2.0 | 550 | 20 | | — |
| SSL-LX100133SRC/B | | STANDARD | GaAlAs | Red | 660 | Clear | 1.7 | 1000 | 30 | | — |
| SSL-LX100133SRC/C | | STANDARD | GaAlAs | Red | 660 | Clear | 1.7 | 1600 | 30 | | — |
| SSL-LX100133SRC/D | | STANDARD | GaAlAs | Red | 660 | Clear | 1.7 | 2000 | 30 | | — |
| SSL-LX100133SRC/E | | STANDARD | GaAlAs | Red | 660 | Clear | 1.7 | 2500 | 30 | | — |
| SSL-LX100133SRD | | STANDARD | GaAlAs | Red | 660 | Diffused | 1.7 | 30 | 60 | | — |
| SSL-LX100133SRD/B | | STANDARD | GaAlAs | Red | 660 | Diffused | 1.7 | 160 | 60 | | — |
| SSL-LX100133SRD/C | | STANDARD | GaAlAs | Red | 660 | Diffused | 1.7 | 275 | 60 | | — |
| SSL-LX100133SRD/D | | STANDARD | GaAlAs | Red | 660 | Diffused | 1.7 | 400 | 60 | | — |
| SSL-LX100133SRD/E | | STANDARD | GaAlAs | Red | 660 | Diffused | 1.7 | 500 | 60 | | — |
| SSL-LX100133SRD/F | | STANDARD | GaAlAs | Red | 660 | Diffused | 1.7 | 600 | 60 | | — |
| SSL-LX100133SRD/G | | STANDARD | GaAlAs | Red | 660 | Diffused | 1.7 | 725 | 60 | | — |
| SSL-LX100133SUGC | | HIGH | AlInGaP | Green | 574 | Clear | 2.2 | 1000 | 40 | | — |
| SSL-LX100133SUGD | | HIGH | AlInGaP | Green | 574 | Diffused | 2.2 | 200 | 60 | | — |
| SSL-LX100133SYC | | HIGH | AlInGaP | Yellow | 590 | Clear | 2.0 | 850 | 30 | | — |
| SSL-LX100133SYD | | HIGH | AlInGaP | Yellow | 590 | Diffused | 2.0 | 350 | 80 | | — |
| SSL-LX100133USBC | | HIGH | InGaN | Blue | 470 | Clear | 3.5 | 800 | 15 | | — |
| SSL-LX100133USBD | | HIGH | InGaN | Blue | 470 | Diffused | 3.5 | 300 | 60 | | — |
| SSL-LX100133YC | | STANDARD | GaAsP | Yellow | 585 | Clear | 2.1 | 130 | 30 | | — |
| SSL-LX100133YD | | STANDARD | GaAsP | Yellow | 585 | Diffused | 2.1 | 30 | 60 | | — |

| DATE | REVISIONS | REV |
|---------|---------------------------------------|-----|
| 7-3-96 | E.C.N. #10204./ | A |
| 3-10-98 | E.C.N. #10BRDR. & #10421. & REDRAWN./ | B |

| DRAWING NUMBER | REV |
|-----------------|-----|
| SSL-LX100133SYD | B |



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

| PARAMETER | MIN | TYP | MAX | UNITS | TEST COND |
|--------------------|-----------------|--------------|-----|-------------------------|----------------------|
| PEAK WAVELENGTH | | 595 (YELLOW) | | nm | |
| FORWARD VOLTAGE | | 2.0 | 2.5 | V_f | |
| REVERSE VOLTAGE | 5.0 | | | V_r | $I_f=100\mu\text{A}$ |
| AXIAL INTENSITY | | 350 | | mcd | $I_f=20\text{mA}$ |
| VIEWING ANGLE | | 60 | | $2 \times \text{theta}$ | |
| EMITTED COLOR: | YELLOW | | | | |
| EPOXY LENS FINISH: | YELLOW DIFFUSED | | | | |

LIMITS OF SAFE OPERATION AT 25°C

| PARAMETER | MAX | UNITS |
|----------------------------------|------------|------------------------------|
| PEAK FORWARD CURRENT* | 150 | mA |
| STEADY CURRENT | 30 | mA |
| POWER DISSIPATION | 125 | mW |
| DERATE FROM 25°C | -1.2 | $\text{mW}/^{\circ}\text{C}$ |
| OPERATING, STORAGE TEMP. | -40 TO +85 | $^{\circ}\text{C}$ |
| SOLDERING TEMP. | +260 | $^{\circ}\text{C}$ |
| 2.0mm FROM BODY | | 3 SEC. MAX |

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

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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| | | | |
|---------------|------|--------|-------|
| DATE: 4-26-95 | DWN: | CHK'D: | APPD: |
| SCALE: N/A | | | |

T-3 1/8mm (T-10) LED, SUPER YELLOW, YELLOW DIFFUSED LENS.

| | | |
|-------------|-----------------------------------|----------|
| PAGE 1 OF 1 | DRAWING NUMBER SSL-LX100133SYD | REV B |
|-------------|-----------------------------------|----------|

UNLESS OTHERWISE SPECIFIED TOLERANCE IS $\pm 0.25\text{mm}$ ($\pm 0.010''$)

DU