

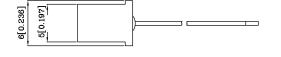


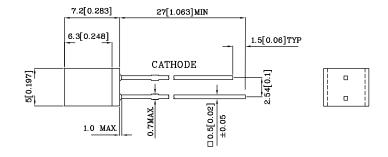
Part Number: XSUR23D

 $5\mathrm{x}5\mathrm{mm}$ SQUARE TOP LED LAMP

Features

- LOW POWER CONSUMPTION.
- ULTRA BRIGHTNESS IS AVAILABLE.
- WIDE VIEWING ANGLE.
- RELIABLE AND RUGGED.
- EXCELLENT UNIFORMITY OF LIGHT OUTPUT.
- IDEAL AS FLUSH MOUNTED PANEL INDICATORS.
- LONG LIFE SOLID STATE RELIABILITY.
- RoHS COMPLIANT.





Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is \pm 0.25(0.01") unless otherwise noted.

| Absolute maximum ratings (TA=25°C) | UR (GaAsP/ GaP) | Unit | | |
|--|-----------------------|-----------|----|--|
| Reverse Voltage | VR | 5 | V | |
| Forward Current | IF | 30 | mA | |
| Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width | ifs | 160 | mA | |
| Power Dissipation | Рт | 105 | mW | |
| Operating Temperature | TA | -40 ~ +85 | °C | |
| Storage Temperature | Tstg | -40 ~ +85 | | |
| Lead Solder Temperature [2mm Below Package Base] | 260°C For 3 Seconds | | | |
| Lead Solder Temperature [5mm Below Package Base] | 260°C For 5 Seconds | | | |

| Operating Characteristic (TA=25°C) | UR (GaAsP/ GaP) | Unit | |
|--|-----------------------|------|----|
| Forward Voltage (Typ.) (IF=10mA) | $V_{\rm F}$ | 1.9 | V |
| Forward Voltage (Max.) (IF=10mA) | $V_{\rm F}$ | 2.5 | V |
| Reverse Current (VR=5V) | IR | 10 | uA |
| Wavelength of Peak Emission (IF=10mA) | λΡ | 627 | nm |
| Wavelength of Dominant Emission (IF=10mA) | λ D | 625 | nm |
| Spectral Line Full Width At Half-Maximum (IF=10mA) | Δλ | 45 | nm |
| Capacitance (VF=0V, f=1MHz) | С | 15 | pF |

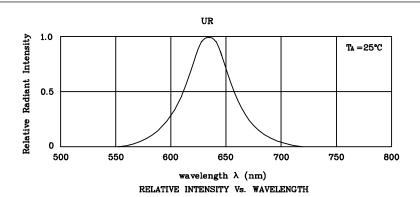
| Part Number | Emitting Color | Emitting Material | Lens-color | Luminous Intensity (IF=10mA) mcd | | Wavelength nm λ P | Viewing Angle 2 θ 1/2 |
|------------------|-------------------|----------------------|--------------|---|------|-------------------------|-----------------------------|
| | | | | min. | typ. | | |
| XSUR23D | Red | GaAsP/GaP | Red Diffused | 3 | 5 | 627 | 110° |
| | | | | | | | |
| Published Date : | MAY 26,2005 | Drawing | No: XDSA2519 | V3 | Che | cked : B.L.LIU | P.1/3 |



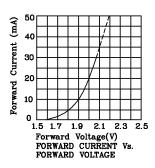


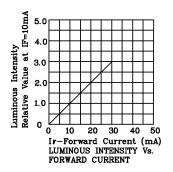
Part Number: XSUR23D

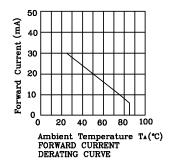
5x5mm SQUARE TOP LED LAMP

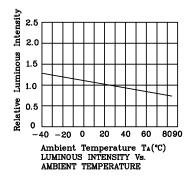


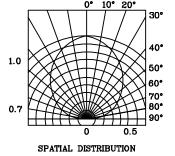
❖ UR











Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity or wavelength), the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous Intensity: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

Published Date : MAY 26,2005 Drawing No : XDSA2519 V3 Checked : B.L.LIU P.2/3



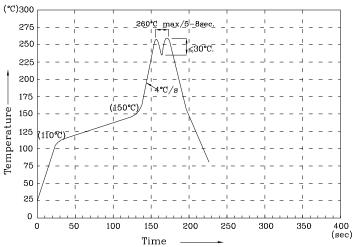


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 $5\mathrm{x}5\mathrm{mm}$ SQUARE TOP LED LAMP

XSUR23D

Wave Soldering Profile For Lead-free Through-hole LED.



- NOTES:
 - 1.Recommend the wave temperature 245°C~260°C.The maximum soldering temperature should be less than 260°C.
 - 2.Do not apply stress on epoxy resins when temperature is over 85 degree °C.
 - 3. The soldering profile apply to the lead free soldering ($\mathrm{Sn}/\mathrm{Cu}/\mathrm{Ag}$ alloy).
 - 4. No more than once.

 $Published\ Date: MAY\ 26,2005 \qquad \qquad Drawing\ No: XDSA2519 \qquad \qquad V3 \qquad \qquad Checked: B.L.LIU \qquad P.3/3$