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SPECIFICATION

PART NO. : LT8A22-43-UR96-T4

0805 SMD CHIP LED



Approved by

Checked by

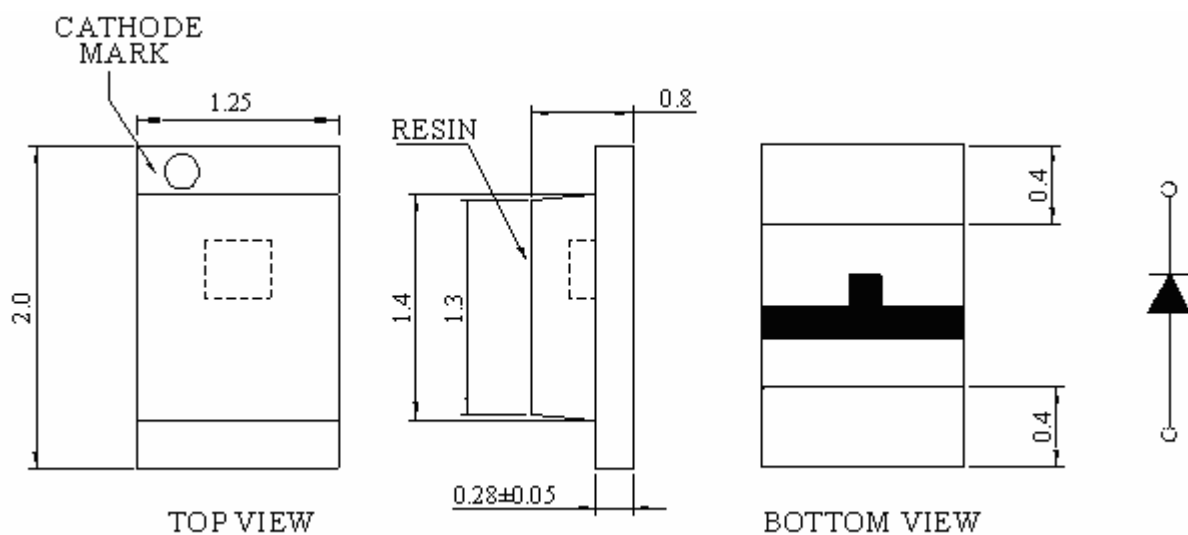
Prepared by

Tung

Lian

Jack

Package Dimensions



Notes:

1. All dimensions are in mm.
2. Tolerance is ± 0.1 mm unless otherwise noted.

Description

| Part No. | LED Chip | | Lens Color |
|-------------------|--------------|----------------|----------------|
| | Material | Emitting Color | |
| LT8A22-43-UR96-T4 | AlGaInP/GaAs | Yellow Green | White Diffused |

Absolute Maximum Ratings at Ta=25 °C

| Parameter | Symbol | Rating | Unit |
|-------------------------------------------------|-----------------------|------------------------------------|------|
| Power Dissipation | P _D | 72 | mW |
| Reverse Voltage | V _R | 5 | V |
| D.C. Forward Current | I _f | 30 | mA |
| Peak Current(1/10Duty Cycle,0.1ms Pulse Width.) | I _f (Peak) | 80 | mA |
| Operating Temperature Range | T _{opr.} | -30 to +80 | °C |
| Storage Temperature Range | T _{stg.} | -40 to +85 | °C |
| Soldering Temperature. | T _{sol.} | Reflow Soldering:260°C for 10 sec. | |

Electrical and Optical Characteristics:

| Parameter | Symbol | Condition | Min. | Typ. | Max. | Unit |
|-------------------------|----------------|----------------------|------|------|------|------|
| Luminous Intensity | I _v | I _f =20mA | 16.5 | 30 | | mcd |
| Forward Voltage | V _f | I _f =20mA | 1.8 | | 2.4 | V |
| Peak Wavelength | λ _p | I _f =20mA | | 575 | | nm |
| Dominant Wavelength | λ _d | I _f =20mA | | 571 | | nm |
| Reverse Current | I _r | V _R =5V | | | 100 | μA |
| Viewing Angle | 2 θ 1/2 | I _f =20mA | | 140 | | deg |
| Spectrum Line Halfwidth | Δλ | I _f =20mA | | 20 | | nm |

Notes:1.The datas tested by IS tester.

2. Customer's special requirements are also welcome.

Product Specification

| | Specification | Material | Quantity |
|--------------|------------------------------------------------------------------------------------------------|------------------------|------------------|
| IV | P: 16.5-24.4 mcd Q: 24.4-36.7 mcd R: 36.7-51.6 mcd @20mA | | |
| λ D | 28: 564-568nm 29: 568-570 nm 30: 570-572 nm 31: 572-574 nm 32: 574-576 nm @20mA | | |
| VF | G:1.8-2.0 V H:2.0-2.2V J: 2.2-2.4V @20mA | | |
| Ir | <100 μ A @Vr=5V | | |
| Resin | White diffused | Epoxy resin | |
| Carrier tape | | Conductive black tape | 4000pcs per reel |
| Reel | | White | |
| Label | LT standard | Paper | |
| Packing bag | 250x220mm | Aluminum laminated bag | One reel one bag |
| Carton | LT standard | Paper | Non-specified |
| Others: | | | |

Lot No.:

W O Z A 3 0 0 0 6 2

↑ Internal Tracing Code
 ↑ Mfg. Year
 ↑ Flowing Code

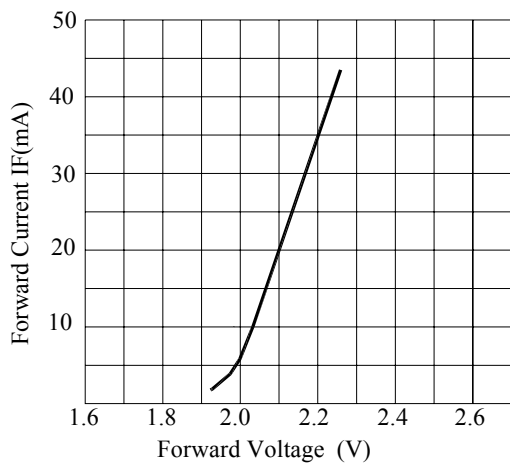
BIN CODE :

X X - X

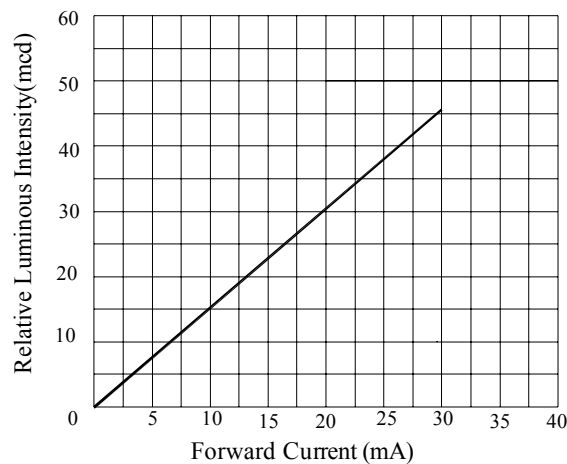
↑ IV Rank
 ↑ λ d Rank
 ↑ VF Rank

Typical Electrical/Optical Characteristic Curves

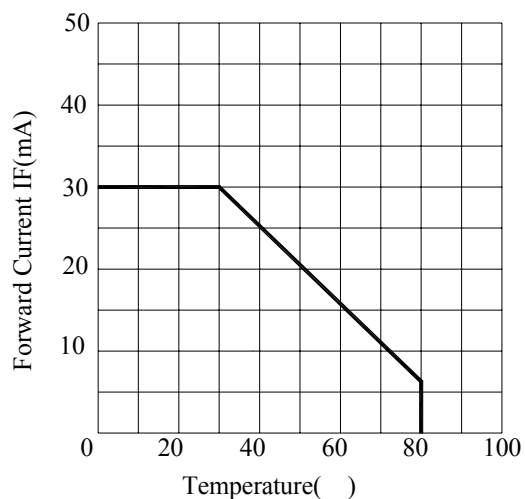
(25°C Ambient Temperature Unless Otherwise Noted)



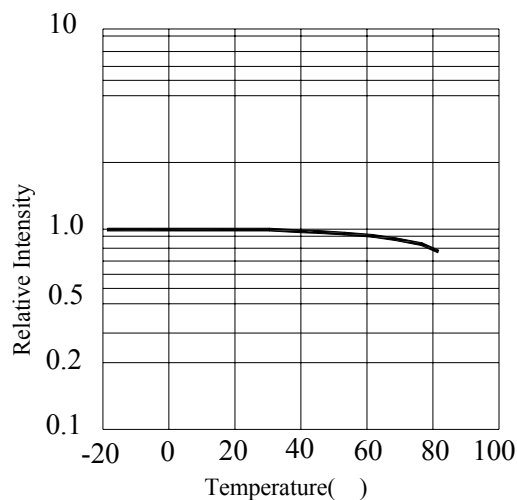
FORWARD CURRENT VS. APPLIED VOLTAGE



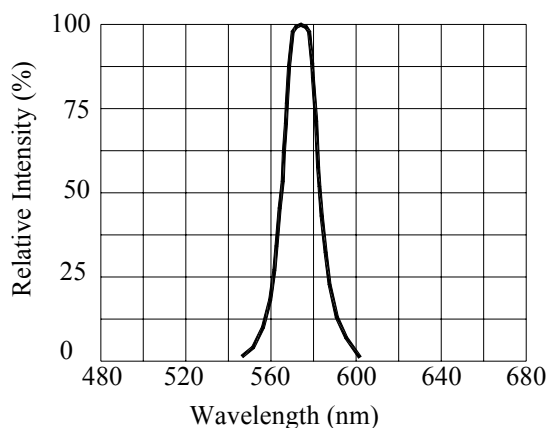
RELATIVE INTENSITY VS. FORWARD CURRENT



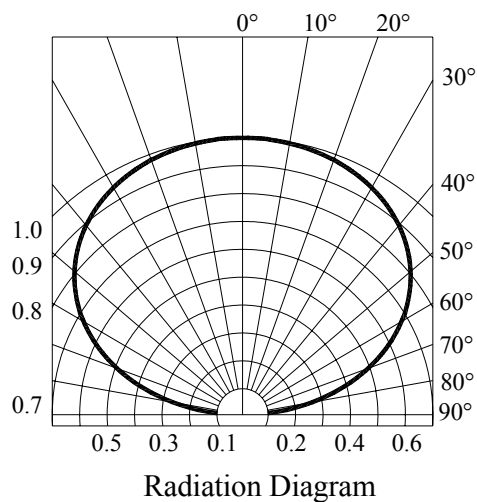
FORWARD CURRENT VS. AMBIENT TEMPERATURE



RELATIVE INTENSITY VS. AMBIENT TEMPERATURE



RELATIVE INTENSITY VS. WAVELENGTH



Radiation Diagram

Precautions in Use:

Storage

Recommend storage environment

Temperature : 5 ~ 30 (41°F ~ 86°F)

Humidity : 60% RH Max.

Moisture measures: Please refer to Moisture-sensitive label on reels package bags.

If unused LEDs remain, they should be stored in moisture proof packages, such as sealed container with packages of moisture absorbent material (silica gel). It is also recommended to return the LEDs to the original moisture proof bag and to reseal the moisture proof bag again.

Fold the opened bag firmly and keep in dry environment.

Soldering

Reflow Soldering

Recommend use of upper and lower heater type reflow furnace.

260°C Max for up to 10 seconds, one time only.

Pre-heat is 150°C Max for up to 2 minutes Max.

In case of screen-printing, keep metal mask thickness between 0.2mm and 0.3mm.

Cleaning

Surface condition of this device may change when organic solvents such as trichloroethylene or acetone were applied.

Avoid using organic solvent.

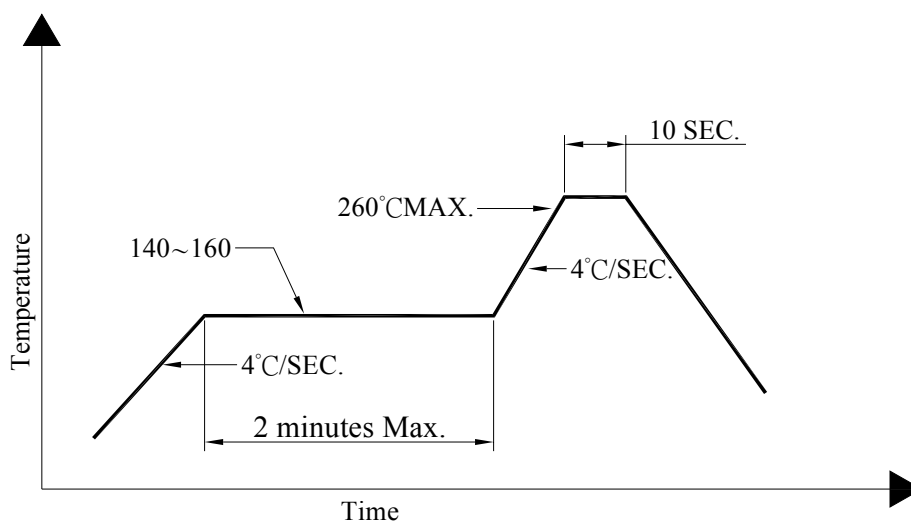
Recommend ultrasonic method 300W Max.

Packaging

EIA-481A standard package.

In 8mm tape on 4000 pcs diameter reels sealed in vapor/ESD barrier bags.

Reflow Temp/Time:



Technical drawing of a cathode assembly. The main view shows a rectangular assembly with a central horizontal section. The left end is labeled "CATHODE". Dimensions include a central width of 2.0 ± 0.05 , a distance of 4.0 ± 0.1 from the center to the first hole, and a hole diameter of $\varnothing 1.5 \pm 0.1$. The right side has a width of 1.75 ± 0.1 and a distance of 3.5 ± 0.05 from the center to the last hole. The total height is 8.0 ± 0.30 . Two cross-sections are shown: the top one has a width of 0.90 ± 0.1 and a height of 2.26 ± 0.10 ; the bottom one has a width of 1.40 ± 0.1 . A scale bar indicates a length of 10 units.

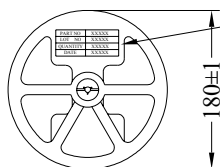
Technical drawing of a film reel showing three views: END, TAPE, and START.

- END View:** A circular view of the reel with a diameter dimension of 180 ± 1 .
- TAPE View:** A side view showing the tape and components. It includes labels: "END", "TAPE", "START", "NO COMPONENTS 160mm MIN. TRAILER", "COMPONENTS", and "NO COMPONENTS 400mm MIN. LEADER". A large arrow points from the "COMPONENTS" section to the "NO COMPONENTS 400mm MIN. LEADER" section.
- START View:** A side view showing the tape and components. It includes dimensions: 12 ± 0.5 , 9 ± 0.5 , $\varnothing 60 \pm 0.5$, and $\varnothing 180 \pm 1$.

1.All dimensions are in mm, tolerance is \pm 2.0mm unless otherwise noted.
2.Specifications are subject to change without notice.

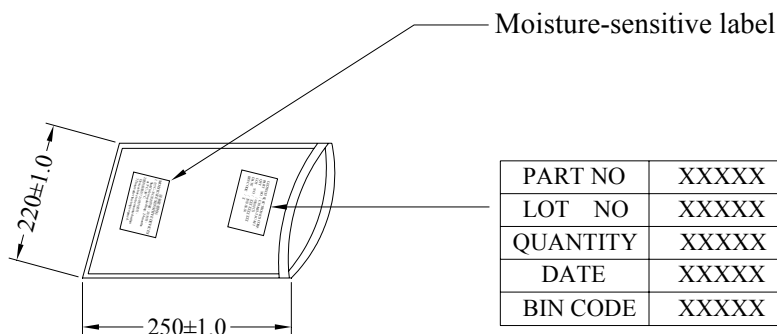
Dimensions for Tape

Reel : 4,000PCS



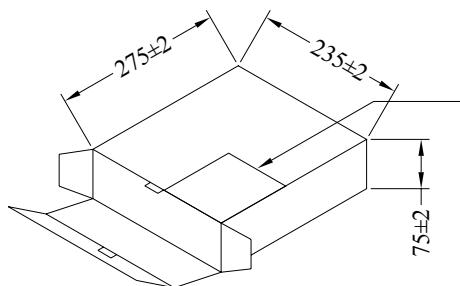
| | |
|----------|--------|
| PART NO | XXXXXX |
| LOT NO | XXXXXX |
| QUANTITY | XXXXXX |
| DATE | XXXXXX |
| BIN CODE | XXXXXX |

Bag : 4,000PCS



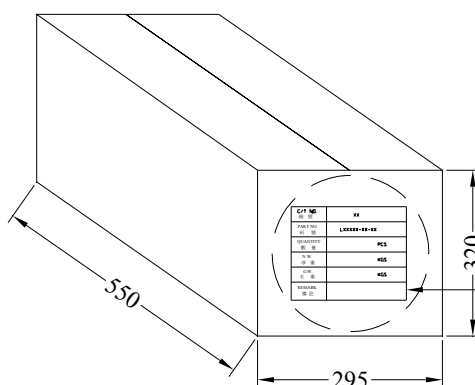
| | |
|----------|--------|
| PART NO | XXXXXX |
| LOT NO | XXXXXX |
| QUANTITY | XXXXXX |
| DATE | XXXXXX |
| BIN CODE | XXXXXX |

5 Bags : 20,000PCS



| | |
|----------|--------|
| PART NO | XXXXXX |
| LOT NO | XXXXXX |
| BIN CODE | XXXXXX |
| QUANTITY | XXXXXX |
| DATE | XXXXXX |

8 Boxes : 160,000PCS



| | |
|----------|--------|
| C/T NO | XX |
| PART NO | XXXXXX |
| QUANTITY | PCS |
| N. W. | KGS |
| G. W. | KGS |
| REMARK | |

Notes:

- 1.7 inch reel-4000 pieces per reel.
- 2.Minimum packing quantity is 500 pieces for remainders.
- 3.The maximum number of consecutive missing lamps is two.