

## FEATURES

Conventional LED design : Simple to use

High Flux and Low Cost : More competitive advantages in the LED industry

Special body frame : Excellent transiting heat from LED chip operating under 150mA.

## ADVANTAGES

Operating Current : 150mA .

Custom Design Light Sourcing Module for 0.4W . . . . .

Excellent Heat Dissipation.

## TYPICAL APPLICATIONS

Reading Light / Flashlight / Track Lighting

Under Shelf / Task Lighting

Emergency Lighting / Traffic Signals

Bollards / Security / Garden Lighting

Full Color Sign Boards



## ABSOLUTE MAXIMUM RATINGS Tj=25°C

| Parameter                            | EP2032-150R1 | Units |
|--------------------------------------|--------------|-------|
| DC Forward Current                   | 150          | mA    |
| Pulsed Forward Current               | 500          | mA    |
| Power Dissipation                    | 400          | mW    |
| Dark Current (VR=5V)                 | 100          | uA    |
| Operating Temperature Range          | -20 to 80    | °C    |
| Storage Temperature Range            | -35 to 85    | °C    |
| Soldering Temperature                | 245          | °C    |
| Thermal Resistance R $\theta$ (°C/W) | 85           | °C/W  |
| LED Junction Temperature             | 110          | °C    |

Operating conditions:

1.Amber operating condition under f=0.5 ~ 2 Hz and 1/2 duty factor .

2. 520mw(White) : 6 pins of E-Power LED required soldering on PCB.

( PCB : 24.5 mm \*24.5 mm , 1.6 t / two layers / 2.0 oz .)

3.Convective IR Reflow SolderingConvective IR Reflow Soldering.

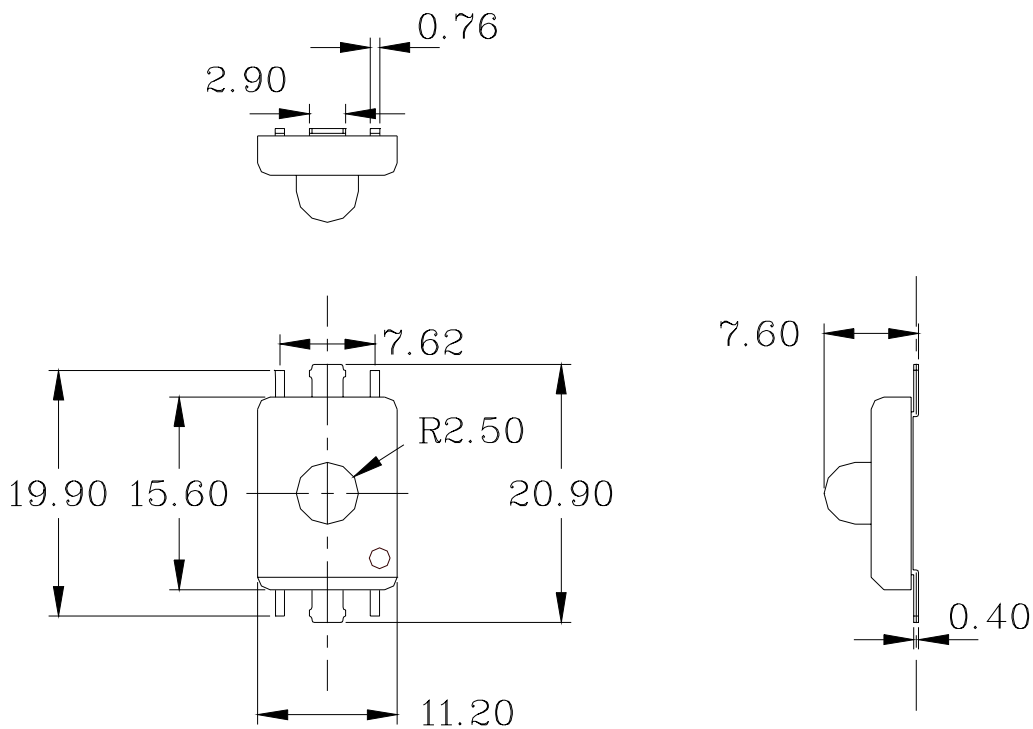
## ELECTRICAL CHARACTERISTICS

Tj=25°C IF=150mA

| Device Type  | Forward Voltage<br>VF (Volts) |      |      | Dark Current<br>VR=5V<br>IR=(uA) |      | Intensity<br>Iv<br>(cd) |      | Total Flux<br>Φv<br>(lm) | Wavelength<br>λD<br>(nm) | Viewing Angle<br>2θ 1/2<br>(Degrees) |
|--------------|-------------------------------|------|------|----------------------------------|------|-------------------------|------|--------------------------|--------------------------|--------------------------------------|
|              | Min.                          | Typ. | Max. | Typ.                             | Max. | Min.                    | Typ. | Typ                      | Typ.                     | Typ.                                 |
| EP2032-150R1 | 2.0                           | 2.4  | 2.8  | 10                               | 100  | 18                      | 30   | 3                        | 620                      | 10°                                  |

This specification is subject to change without notice.

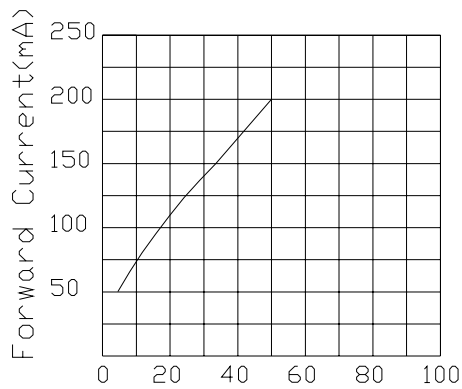
## OUTLINE DRAWINGS



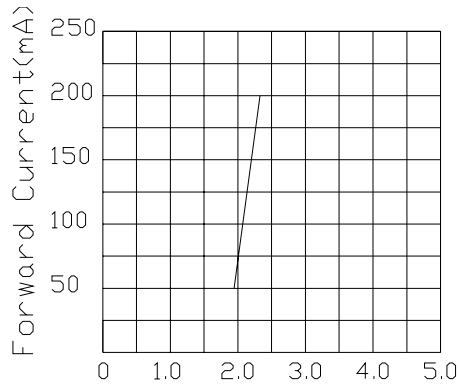
### NOTE

1. All dimensions are in millimeters.
2. Tolerance is 0.25mm unless otherwise specified.
3. This specification is subject to change without notice.

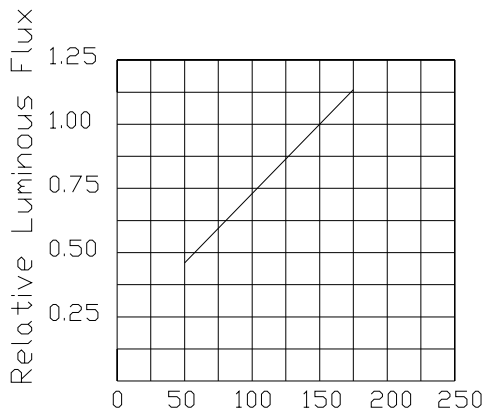
## CHARACTERISTICS CURVE



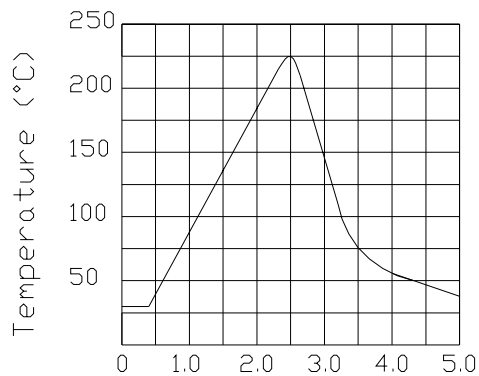
Junction Temperature (°C)  
RED



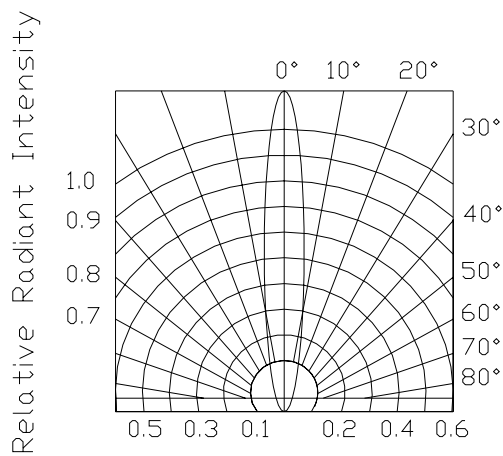
Forward Voltage VF(V)  
RED



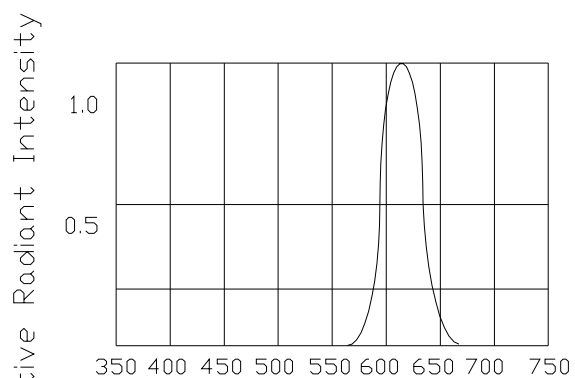
Forward Current(mA)  
RED



TIME(min)  
Soldering Temperature

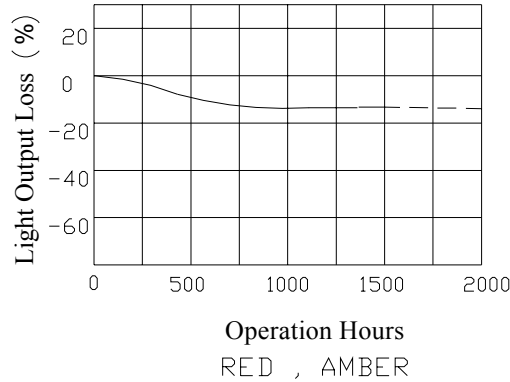


VIEW ANGLE  
EP2032-150XX



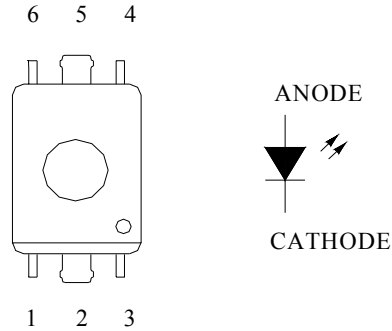
Wavelength(nm)  
Spectral Distribution  
RED

## Operation Life



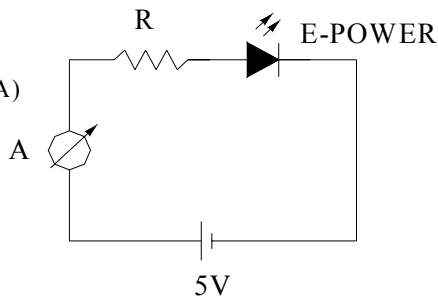
## PIN CONNECTION

| COLOR   | R      | G | B | C | A      |
|---------|--------|---|---|---|--------|
| ANODE   | 6      | 6 | 6 | 6 | 6      |
| CATHODE | 2<br>5 | 3 | 3 | 3 | 2<br>5 |



## TEST CIRCUIT

| COLOR | Vf (min) | R(100mA) | R(150mA) |
|-------|----------|----------|----------|
| R     | 2.0V     | 30 Ω     | 20 Ω     |



## PART NO. SYSTEM OF E-Power LED

EP 2 03 2-150 R1

1---2-3-4-5-----6-----7

1.E -Power LED

2.YEAR 2002

3.PACKAGE TYPE:01=10mm LENS;03=5mm LENS;04=11 mm LENS

4.VIEWING ANGLE:2\*5=10°

5.CURRENT:150mA

6.λD: R1=620nm (Red)