

YETDA INDUSTRY LTD.

5mm Oval Red LED Lamps Q546HSH4D-BK

5mm Oval with AlGaInP Dice •

Encapsulated with Water Clear Lens Package •

Long Leads •

Absolute Maximum Ratings : (Ta=25℃)

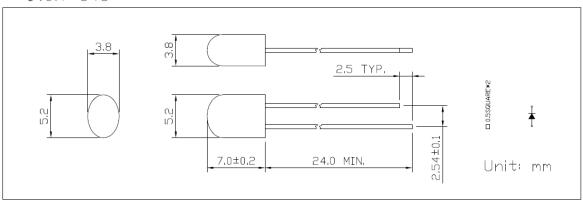
| Parameter | Symbol | Maximum Rating | Unit | | | |
|---|--------|----------------|----------------|--|--|--|
| Power Dissipation | PD | 85 | mw | | | |
| Reverse Voltage | VR | 5 | V | | | |
| Average Forward Current | Laf | 30 | mA | | | |
| Peak Forward Current (Duty=0.1,10KHZ) | IPF | 75 | mA | | | |
| Opertating Temperature Range | Topr | -25°C to +80 | $^{\circ}\! C$ | | | |
| Storage Temperature Range | Tstg | -35°C to +85 | $^{\circ}\! C$ | | | |
| Lead Soldering Temperature {1.6mm(0.063inch) From Body} 260°C For 3 Seconds | | | | | | |

Electro-Optical Characteristics ($Ta = 25^{\circ}C$)

| Parameter | Test Condition | Symbol | Min. | Тур. | Max. | Unit |
|--------------------|----------------------|----------------|------|------|------|------|
| Forward Voltage | $I_F = 20 \text{mA}$ | VF | | 2.0 | 2.4 | V |
| Reverse Current | $V_R = 5V$ | IR | | | 10 | uA |
| Luminous Intensity | $I_F = 20 \text{mA}$ | Iv | 500 | 600 | 700 | mcd |
| Wavelength | IF = 20mA | λр | | | | nm |
| | | λd | 620 | 625 | 630 | nm |
| Viewing Angle | $I_F = 20 mA$ | 2 0 1/2 | | 75 | | deg |

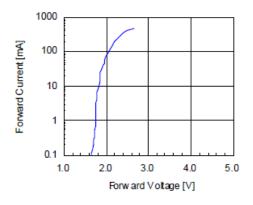
Package

Item: 546



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Typical Electro-Qptical Characteristics Curve:



3.0 2.5 Nomerize (2) 1.5 0.0 1 10 100 1000 Forward Current [mA]

Fig 3. Forward Voltage vs. Temperature

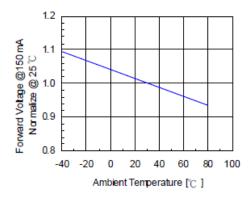


Fig 4. Relative Intensity vs. Temperature

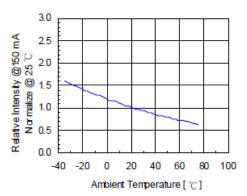
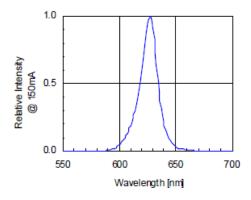


Fig 5. Relative Intensity vs. Wavelength





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Soldering:

1. Manual of soldering

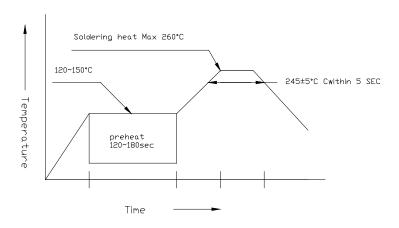
The temperature of the iron tip should not be higher than 260 °C and Soldering within 3 seconds per solder-land is to be observed

2. DIP soldering (Wave Soldering):

Preheating:120

°C~150°C within 5 sec.260°C(Max)

Gradual Cooling (Avoid quenching)



•Handling:

Care must be taken not to cause to the epoxy resin portion of Yetda LEDS while it is exposed to high temperature.

Care must be taken not rub the epoxy resin portion of Yetda LEDS with hard or sharp article such as the sand blast and the metal hook