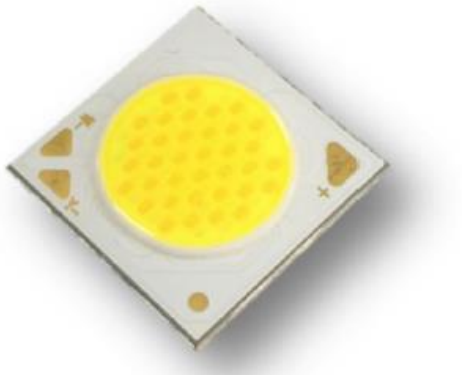
**Part No: COB-QUAD-2760W22**

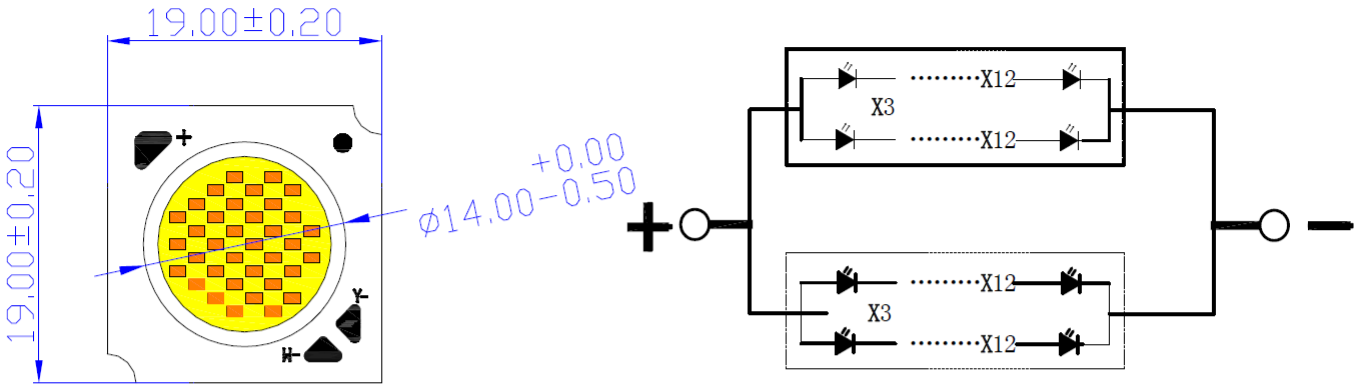


# Features

- High brightness、high reliability、long life
- Light angle：120°
- Typical color temperature：2700K/6000K
- Ra ： 80+

**Part No: COB-QUAD-2760W22**

## Outline dimensions & Circuit structure




**NOTES:**

- All dimensions are millimeter.
- Tolerance is ±0.3mm unless otherwise noted.
- It is strongly recommended that the temperature of TS （Welding plate ） is not higher than 90℃.

## Limit parameter（Ta = 25℃）

| Parameter | Symbol | Test Condition | Value | | Unit |
|---|---|---|---|---|---|
| | | | Min. | Max | |
| DC Forward Current | IF | ---- | ---- | 750 | mA |
| Peak Pulse Current | Ipeak | Duty=1/10 1kHz | ---- | 940 | mA |
| Power Dissipation | Pd | ---- | ---- | 30 | W |
| LED Junction Temperature | TJ | ---- | ---- | 125 | ℃ |
| Operating Temperature | Topr | ---- | -40 | +85 | ℃ |
| Storage Temperature | Tstr | ---- | -40 | +100 | ℃ |
| ESD Sensitivity | ---- | HBM | 2000 | ---- | V |
| Soldering Temperature | ---- | ---- | 350℃ for 5 Seconds max | | |

**Part No: COB-QUAD-2760W22**

## Photoelectric parameters （Ta = 25℃）

| CCT | Item | Symbol | Test Condition | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|---|
| 2700K | Forward Voltage | VF | IF=600mA | -- | 36 | -- | V |
| | Luminous Flux | Φ | | 2300 | -- | -- | lm |
| | Color Temperature | CCT | | 2650 | 2725 | 2800 | K |
| | General Color Rendering Index | Ra | | 80 | -- | -- | |
| | Thermal Resistance | RJ | | -- | 1.1 | -- | ℃/W |
| 6000K | Forward Voltage | VF | IF=600mA | -- | 36 | -- | V |
| | Luminous Flux | Φ | | 2600 | -- | -- | lm |
| | Color Temperature | CCT | | 5720 | 6000 | 6350 | K |
| | General Color Rendering Index | Ra | | 80 | -- | -- | |
| | Thermal Resistance | RJ | | -- | 1.1 | -- | ℃/W |

## Chromaticity Coordinates Ranks(IF=600mA Ta=25℃)

| Stands | Colour tenperature | Center of Coordinates | Long axis | Minor axis | Gradient | Colour tenperature | Explain |
|---|---|---|---|---|---|---|---|
| | TC | X | Y | a | b | TC | SDCM |
| ANSI | 6500K | 0.3123 | 0.3282 | 0.00892 | 0.0038 | 6500K | 4-step MacAdam |
| | 5000K | 0.3447 | 0.3553 | 0.00822 | 0.00354 | 5000K | 3-step MacAdam |
| | 4000K | 0.3818 | 0.3797 | 0.00939 | 0.00402 | 4000K | |
| | 3500K | 0.4073 | 0.3917 | 0.00951 | 0.00417 | 3500K | |
| | 3000K | 0.4338 | 0.403 | 0.00714 | 0.00408 | 3000K | |
| | 2700K | 0.4578 | 0.4101 | 0.00774 | 0.00411 | 2700K | |
| IEC | 6500K | 0.3130 | 0.337 | 0.0089 | 0.0038 | 6500K | 4-step |

## Part No: COB-QUAD-2760W22

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | 0 | 2 | | | MacAdam |
| | 5000K | 0.3460 | 0.3590 | 0.00822 | 0.00354 | 5000K | 3-step MacAdam |
| | 4000K | 0.3800 | 0.3800 | 0.00939 | 0.00402 | 4000K | |
| | 3500K | 0.4090 | 0.3940 | 0.00951 | 0.00417 | 3500K | |
| | 3000K | 0.4400 | 0.4030 | 0.00714 | 0.00408 | 3000K | |
| | 2700K | 0.4630 | 0.4200 | 0.00774 | 0.00411 | 2700K | |

| Code | Colour temperature |
|---|---|
| W27 | 2700K |
| W30 | 3000K |
| W35 | 3500K |
| W40 | 4000K |
| W50 | 5000K |
| W60 | 6000K |
| W65 | 6500K |

**NOTES:**

- Our company deliver according to the 3 order macadam ellipses among 2700K-5000K and deliver the 4 order macadam ellipses among 6000K-6500K for above 3 stands.
- Tolerance of measurements of the Forward Voltage is ±2%V
- Tolerance of measurements of the Luminous Flux is ±15%
- Tolerance of measurements of the Color Rendering Ra is ±2
- Chromaticity Coordinates (x,y) is measured with an accuracy of ±0.01
- The center of Coordinates (x,y) is based on C78.377:2008 ANSI reference
- Ellipse refer to IEC 60081:1997
- Ranking at TC=25℃

**Part No: COB-QUAD-2760W22**

# Typical curve

Fig. 1 Forward Current (mA) Vs Forward Voltage (V)

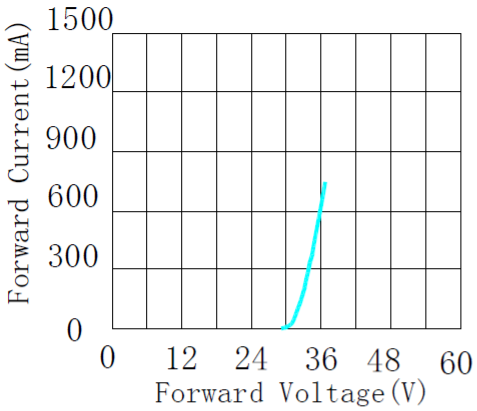



Fig. 2 Relative Intensity Vs Forward Current (mA)

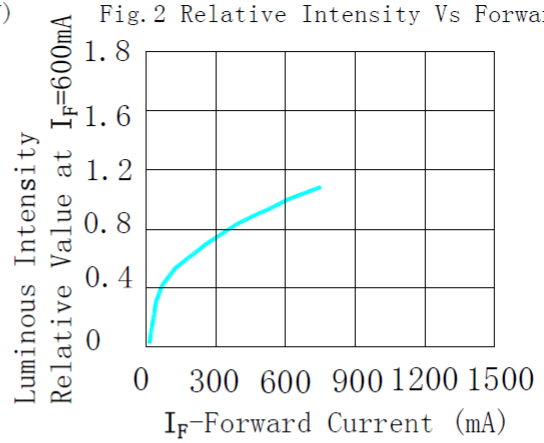



Fig. 3 Forward Current Vs Ambient Temperature

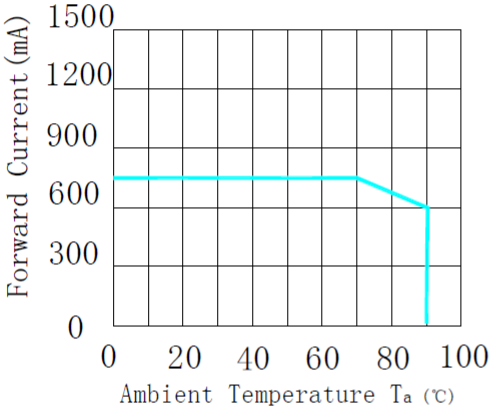
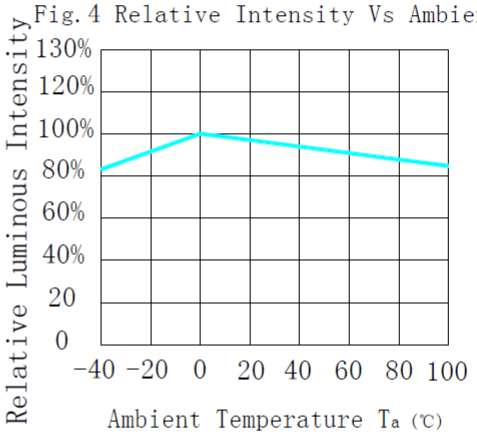
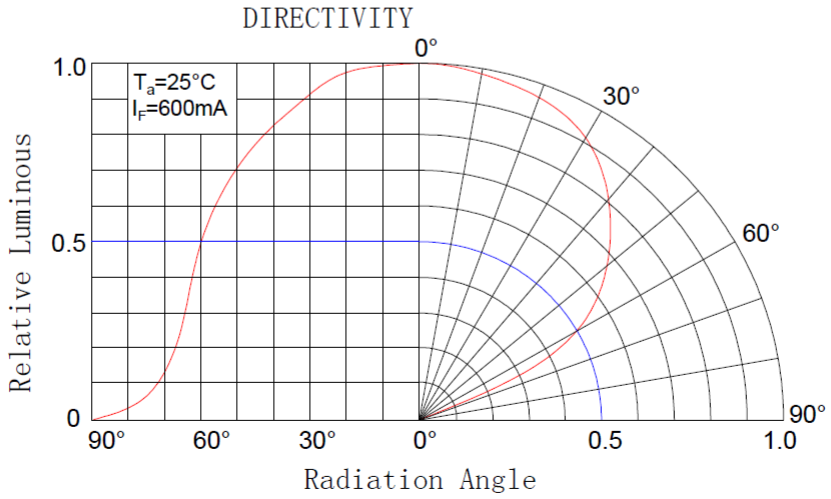



Fig. 4 Relative Intensity Vs Ambient Temperature

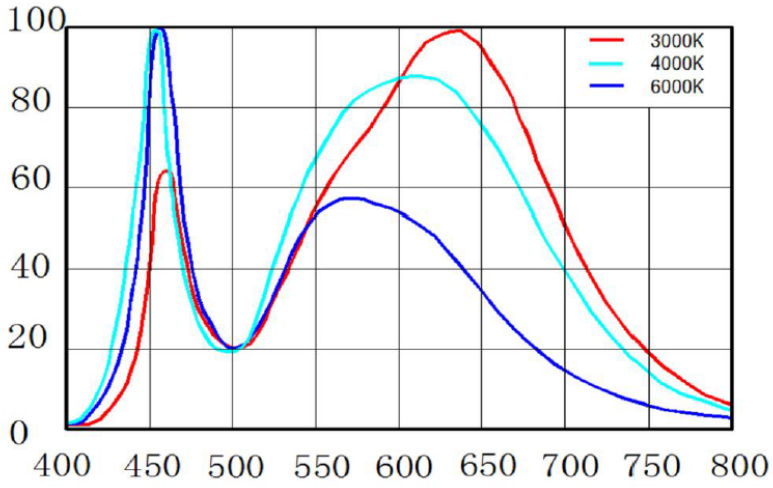


**Part No: COB-QUAD-2760W22**

# Optical Characteristics

Spectrum : CRI(Ra) 80Min. Tj=85℃ If=600mA




# Reliability Tests and Results

| Test | Reference Standard | Test Conditions | Test Duration | Units Failed/Tested |
|---|---|---|---|---|
| Temperature Cycle | JEITA ED-4701 100 105 or MIL-STD-202G | -40℃(30min)∽ 25℃(5min)∽ 100℃(30min)∽ 25℃(5min)or -40℃(30min) ∽ 100℃(30min) | 100cycles | 0/10 |
| High Temperature Storage | JEITA ED-4701 200 201 | $T_A$=90℃ | 1000hours | 0/10 |
| HighTemperature Humidity Storage | JEITA ED-4701 100 103 | $T_A$=85℃ RH=90% | 1000hours | 0/10 |
| Low Temperature Storage | JEITA ED-4701 200 202 | $T_A$=-40℃ | 1000hours | 0/10 |
| High Temperature Operating Life | JESD22-A108D | TC=85℃ $I_F$=600mA | 1000hours | 0/10 |
| Electrostatic Discharges | JEITA ED-4701 300 304 | HBM 2KV 3KΩ 100Pf 3pulses nedative | | 0/10 |
| Temperature Cycle *1 | Sunpu-opto | -40℃(30min)∽ (90s)∽110℃ (30min) ∽ (90s) -40℃ | 300cycles | 0/10 |
| Temperature Humidity Storage*2 | Sunpu-opto | $T_A$=85℃ RH=85% $I_F$=600mA | 1000hours | 0/10 |

**Part No: COB-QUAD-2760W22**

**NOTES:**
Measurements are performed after allowing the LEDs to return to room temperature Failure Criteria.

| Items | Conditions | Failure Criteria |
|---|---|---|
| Forward Voltagd (VF) | $I_F$=600mA | >Initial value x 1.1 |
| Luminous Flux (ΦV) | $I_F$=600mA | <Initial value x 0.7 |

# Packaging

100PCS

