



NATIONSTAR
—SINCE 1969—



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—SINCE 1969—

LEDs
FOR LIGHTING APPLICATIONS

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Advanced LED Packaging Manufacturer



NATIONSTAR | **2017**
LIGHTING UP THE WORLD

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01 BRIEF INTRODUCTION



The Northern Area of The Headquarter

Land area: 26000 sqm.
The production base of LED components and devices

The Southern Area of The Headquarter

Land area: 34600 sqm
The production base of LED and lighting products



Foshan NationStar Semiconductor Co.,Ltd.

Land area: 32000 sqm.
The production base of GaN LED chips for lighting



02 INDUSTRIAL CHAIN



Wafer



Chip



LED

02 HISTORY

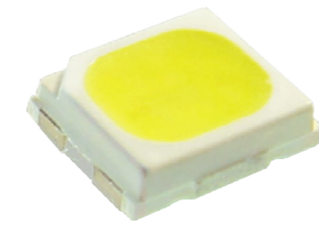


NationStar White LED Road Map

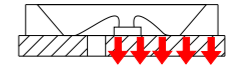


3V 0.2W TOP White LED

P3528 Series

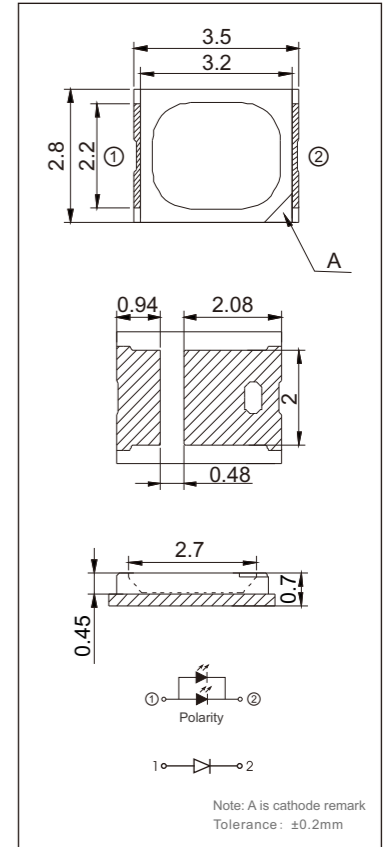


Thermal Dissipating Structure:



With a structure of the chip being placed on thermal pad the heat could be conducted to the PCB directly.

Dimensions/Unit:mm



Features:

- 2835 package.
- Thin encapsulation with heat sink, vertical dissipation, multiple power options.
- Mature technology, universal applicability.
- Applicable to LED tube, linear light, bulb, downlight, panel light etc. cost-effective.
- Rated power: 0.2W.



Parameter/Ta=25°C:

| Power | Color | Part number | Color Temp (K) | CRI Ra Min | I _F (mA) TEST | Φ _v (lm) Typ. | V _F (V) Typ. | Max Forward Current(mA) |
|-------|---------------|-----------------------|----------------|------------|--------------------------|--------------------------|-------------------------|-------------------------|
| 0.2W | Natural White | FM-P3528WNS-460QH-R80 | 5600-6500 | 80 | 60 | 28-30 | 3.1 | 120 |
| | Neutral White | FM-P3528WDS-460QH-R80 | 3700-4200 | 80 | 60 | 28-30 | 3.1 | 120 |
| | Warm White | FM-P3528WLS-460QH-R80 | 2800-3200 | 80 | 60 | 26-28 | 3.1 | 120 |
| 0.2W | Natural White | FM-P3528WNS-460Q-R80 | 5600-6500 | 80 | 60 | 26-28 | 3.1 | 75 |
| | Neutral White | FM-P3528WDS-460Q-R80 | 3700-4200 | 80 | 60 | 26-28 | 3.1 | 75 |
| | Warm White | FM-P3528WLS-460Q-R80 | 2800-3200 | 80 | 60 | 24-26 | 3.1 | 75 |
| 0.2W | Natural White | FM-P3528WNS-460Q1-R80 | 5600-6500 | 80 | 60 | 24-26 | 3.1 | 75 |
| | Neutral White | FM-P3528WDS-460Q1-R80 | 3700-4200 | 80 | 60 | 24-26 | 3.1 | 75 |
| | Warm White | FM-P3528WLS-460Q1-R80 | 2800-3200 | 80 | 60 | 22-24 | 3.1 | 75 |

3V 0.5W TOP White LED

P3528 Series

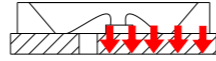


Features:

- 2835 package.
- Thin encapsulation with heat sink, efficient heat dissipation.
- Applicable to LED bulb, downlight, module etc. cost-effective.
- Rated power: 0.5W.

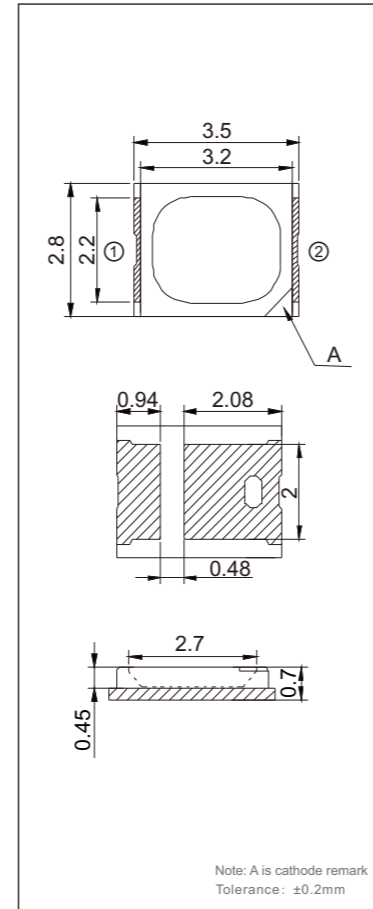


Thermal Dissipating Structure:

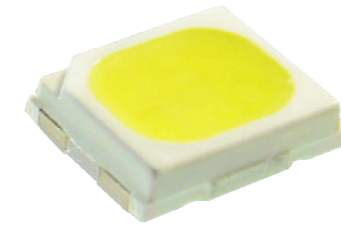


With a structure of the chip being placed on thermal pad the heat could be conducted to the PCB directly.

Dimensions/Unit:mm



Ultra Bright 2835 LED

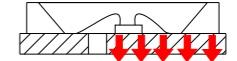


Features:

- 2835 package.
- Thin encapsulation with heat sink, efficient heat dissipation.
- Applicable to LED bulb, downlight etc. cost-effective.

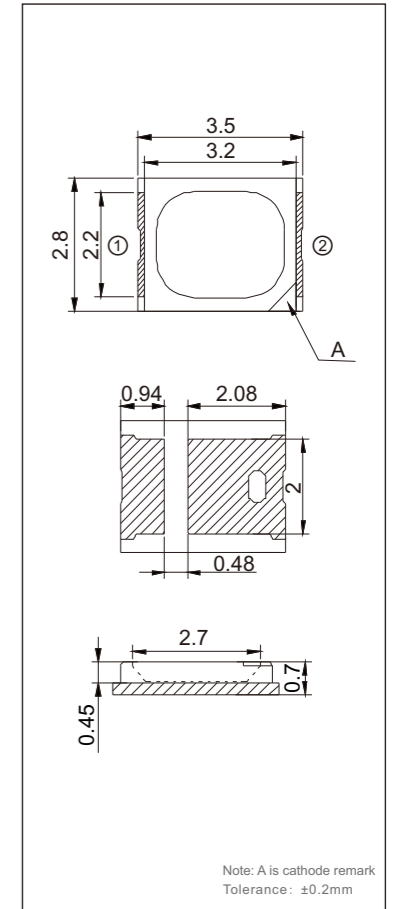


Thermal Dissipating Structure:



With a structure of the chip being placed on thermal pad the heat could be conducted to the PCB directly.

Dimensions/Unit:mm



Absolute Maximum Ratings:

| Parameter | Symbol | Rating |
|--------------------------|------------------|-------------|
| Pulse Forwards Current*2 | I _{FP} | 200mA/500mA |
| Reverse Voltage | V _R | 5V |
| Working Temperature | T _{OPR} | -30~+85°C |
| Storage Temperature | T _{STG} | -40~+100°C |

Parameter/Ta=25°C:

| Power | Color | Part number | Color Temp (K) | CRI Ra Min | I _F (mA) TEST | Φ _v (lm) Typ. | V _F (V) Typ. | Max Forward Current(mA) |
|-------|---------------|-----------------------|----------------|------------|--------------------------|--------------------------|-------------------------|-------------------------|
| 0.5W | Natural White | FM-P3528WNS-460WH-R80 | 5600-6500 | 80 | 150 | 65-70 | 3.1 | 200 |
| | Neutral White | FM-P3528WDS-460WH-R80 | 3700-4200 | 80 | 150 | 65-70 | 3.1 | 200 |
| | Warm White | FM-P3528WLS-460WH-R80 | 2800-3200 | 80 | 150 | 60-65 | 3.1 | 200 |
| 0.5W | Natural White | FM-P3528WNS-460W-R80 | 5600-6500 | 80 | 150 | 55-60 | 3.1 | 200 |
| | Neutral White | FM-P3528WDS-460W-R80 | 3700-4200 | 80 | 150 | 55-60 | 3.1 | 200 |
| | Warm White | FM-P3528WLS-460W-R80 | 2800-3200 | 80 | 150 | 50-55 | 3.1 | 200 |

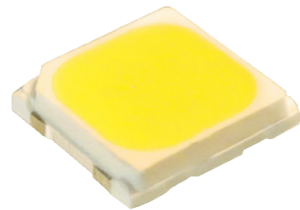
Parameter/Ta=25°C:

| Power | Color | Part number | Color Temp (K) | CRI Ra Min | I _F (mA) TEST | Φ _v (lm) Typ. | V _F (V) Typ. | Max Forward Current(mA) |
|-------|---------------|------------------------|----------------|------------|--------------------------|--------------------------|-------------------------|-------------------------|
| 0.2W | Natural White | FM-P3528WNS-460QH3-R80 | 5600-6500 | 80 | 65 | 33-35 | 2.8 | 120 |
| | Neutral White | FM-P3528WDS-460QH3-R80 | 3700-4200 | 80 | 65 | 33-35 | 2.8 | 120 |
| | Warm White | FM-P3528WLS-460QH3-R80 | 2800-3200 | 80 | 65 | 30-33 | 2.8 | 120 |
| 0.5W | Natural White | FM-P3528WNS-460WH3-R80 | 5600-6500 | 80 | 150 | 70-75 | 3.1 | 240 |
| | Neutral White | FM-P3528WDS-460WH3-R80 | 3700-4200 | 80 | 150 | 70-75 | 3.1 | 240 |
| | Warm White | FM-P3528WLS-460WH3-R80 | 2800-3200 | 80 | 150 | 65-70 | 3.1 | 240 |

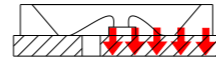


6V Easy-drive TOP White LED

CP3528 / CP3030 Series

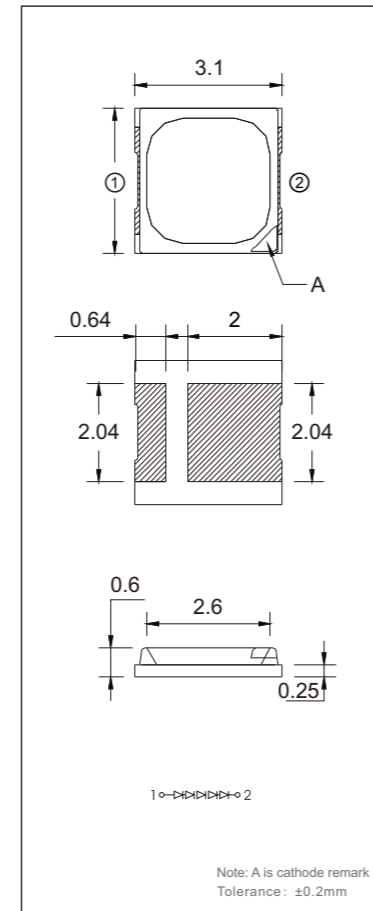


Thermal Dissipating Structure:



With a structure of the chip being placed on thermal pad the heat could be conducted to the PCB directly.

Dimensions/Unit:mm



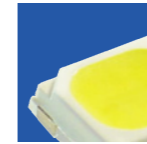
Features:

- Thin encapsulation with heat sink, efficient heat dissipation.
- Applicable to LED bulb, downlight etc, cost-effective.
- Rated power: 0.5W / 1W.



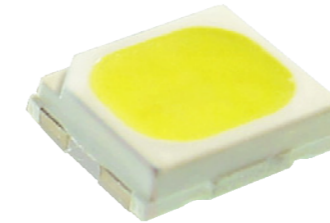
Parameter/Ta=25°C:

| Power | Color | Part number | Color Temp (K) | CRI Ra Min | I _F (mA) TEST | Φ _v (lm) Typ. | V _F (V) Typ. | Max Forward Current(mA) |
|-------|---------------|------------------------|----------------|------------|--------------------------|--------------------------|-------------------------|-------------------------|
| 0.5W | Natural White | FM-CP3528WNS-460Q-R80 | 5600-6500 | 80 | 80 | 60-65 | 6.7 | 100 |
| | Neutral White | FM-CP3528WDS-460Q-R80 | 3700-4200 | 80 | 80 | 60-65 | 6.7 | 100 |
| | Warm White | FM-CP3528WLS-460Q-R80 | 2800-3200 | 80 | 80 | 55-60 | 6.7 | 100 |
| 1W | Natural White | FM-CP3528WNS-460WH-R80 | 5600-6500 | 80 | 150 | 120-130 | 6.4 | 200 |
| | Neutral White | FM-CP3528WDS-460WH-R80 | 3700-4200 | 80 | 150 | 120-130 | 6.4 | 200 |
| | Warm White | FM-CP3528WLS-460WH-R80 | 2800-3200 | 80 | 150 | 110-120 | 6.4 | 200 |
| 1W | Natural White | FM-CP3030WNS-460W-R80 | 5600-6500 | 80 | 180 | 127-140 | 6.4 | 200 |
| | Neutral White | FM-CP3030WDS-460W-R80 | 3700-4200 | 80 | 180 | 127-140 | 6.4 | 200 |
| | Warm White | FM-CP3030WLS-460W-R80 | 2800-3200 | 80 | 180 | 120-130 | 6.4 | 200 |

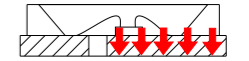


9V Easy-drive TOP White LED

TP3528 Series

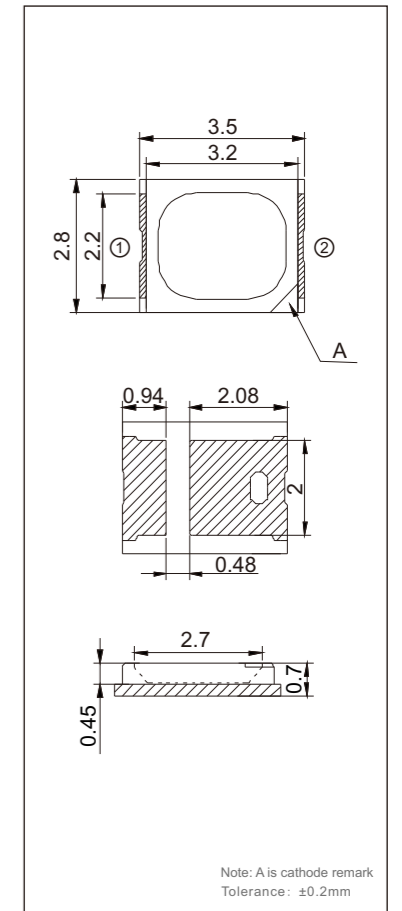


Thermal Dissipating Structure:



With a structure of the chip being placed on thermal pad the heat could be conducted to the PCB directly.

Dimensions/Unit:mm



Features:

- 2835 package.
- 9V drive, low current, high power conversion efficiency.
- Thin encapsulation with heat sink, efficient heat dissipation.
- Applicable to LED bulb, downlight, module etc. cost-effective.
- Rated power: 0.3W / 1W.



Absolute Maximum Ratings:

| Parameter | Symbol | 0.3W Rating | 1W Rating |
|--------------------------|------------------|-------------|------------|
| Forward Current | I _F | 35mA | 120mA |
| Pulse Forwards Current*2 | I _{FP} | 100mA | 200mA |
| Reverse Voltage | V _R | 15V | 15V |
| Working Temperature | T _{OPR} | -30~+85°C | -30~+85°C |
| Storage Temperature | T _{STG} | -40~+100°C | -40~+100°C |

Parameter/Ta=25°C:

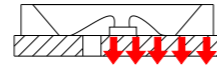
| Power | Color | Part number | Color Temp (K) | CRI Ra Min | I _F (mA) TEST | Φ _v (lm) Typ. | V _F (V) Typ. |
|-------|---------------|------------------------|----------------|------------|--------------------------|--------------------------|-------------------------|
| 0.3W | Natural White | FM-TP3528WNS-460R-R80 | 5600-6500 | 80 | 30 | 33-36 | 9.6 |
| | Neutral White | FM-TP3528WDS-460R-R80 | 3700-4200 | 80 | 30 | 33-36 | 9.6 |
| | Warm White | FM-TP3528WLS-460R-R80 | 2800-3200 | 80 | 30 | 30-33 | 9.6 |
| 1W | Natural White | FM-TP3528WNS-460QH-R80 | 5600-6500 | 80 | 100 | 125-135 | 9.3 |
| | Neutral White | FM-TP3528WDS-460QH-R80 | 3700-4200 | 80 | 100 | 125-135 | 9.3 |
| | Warm White | FM-TP3528WLS-460QH-R80 | 2800-3200 | 80 | 100 | 120-130 | 9.3 |

18V Easy-drive TOP White LED

SP3528 Series

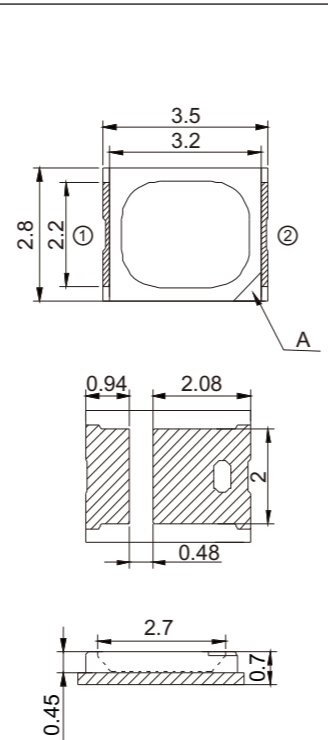


Thermal Dissipating Structure:



With a structure of the chip being placed on thermal pad the heat could be conducted to the PCB directly.

Dimensions/Unit:mm



Note: A is cathode remark
Tolerance: ±0.2mm

Features:

- 2835 package.
- 18V drive, low current, high power conversion efficiency.
- Thin encapsulation with heat sink, efficient heat dissipation.
- Applicable to LED bulb, downlight etc, cost-effective.
- Rated power: 0.6W.



Absolute Maximum Ratings:

| Parameter | Symbol | Rating | |
|--------------------------|------------------|------------|------------|
| Forward Current | I _F | 30mA | 60mA |
| Pulse Forwards Current*2 | I _{FP} | 100mA | 70mA |
| Working Temperature | T _{OPR} | -30~+85°C | -30~+85°C |
| Storage Temperature | T _{STG} | -40~+100°C | -40~+100°C |

Parameter/Ta=25°C:

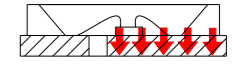
| Power | Color | Part number | Color Temp (K) | CRI Ra Min | I _F (mA) TEST | Φ _v (lm) Typ. | V _F (V) Typ. |
|-------|---------------|-----------------------|----------------|------------|--------------------------|--------------------------|-------------------------|
| 0.6W | Natural White | FM-SP3528WNS-460R-R80 | 5600-6500 | 80 | 30 | 70-75 | 19.0 |
| | Neutral White | FM-SP3528WDS-460R-R80 | 3700-4200 | 80 | 30 | 70-75 | 19.0 |
| | Warm White | FM-SP3528WLS-460R-R80 | 2800-3200 | 80 | 30 | 65-70 | 19.0 |
| 1W | Natural White | FM-SP3528WNS-460Q-R80 | 5600-6500 | 80 | 60 | 130-140 | 18.0 |
| | Neutral White | FM-SP3528WDS-460Q-R80 | 3700-4200 | 80 | 60 | 130-140 | 18.0 |
| | Warm White | FM-SP3528WLS-460Q-R80 | 2800-3200 | 80 | 60 | 125-135 | 18.0 |

High Brightness TOP White LED

2016 Series

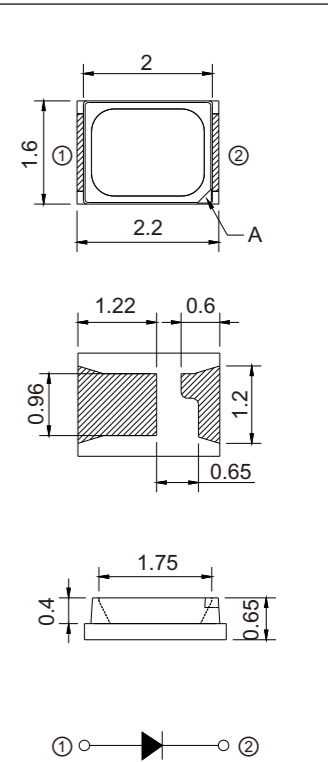


Thermal Dissipating Structure:



With a structure of the chip being placed on thermal pad the heat could be conducted to the PCB directly.

Dimensions/Unit:mm



Note: A is cathode remark
Tolerance: ±0.2mm

Features:

- High refringence, high brightness, anti-sulfur.
- Thin encapsulation with heat sink, efficient heat dissipation.
- High luminous efficiency, high-CRI, long lifespan.
- Eco-friendly, RoHS compliant.
- Rated power: 0.2W.

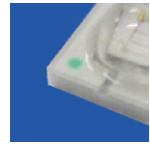


Absolute Maximum Ratings:

| Parameter | Symbol | Rating |
|--------------------------|------------------|------------|
| Forward Current | I _F | 75mA |
| Pulse Forwards Current*2 | I _{FP} | 200mA |
| Reverse Voltage | V _R | 5V |
| Working Temperature | T _{OPR} | -30~+85°C |
| Storage Temperature | T _{STG} | -40~+100°C |

Parameter/Ta=25°C:

| Color | Part number | Color Temp (K) | CRI Ra Min | I _F (mA) TEST | Φ _v (lm) Typ. | V _F (V) Typ. |
|---------------|---------------------|----------------|------------|--------------------------|--------------------------|-------------------------|
| Natural White | FM-2016WNS-460Q-R80 | 5600-6500 | 80 | 60 | 26-28 | 3.2 |
| Neutral White | FM-2016WDS-460Q-R80 | 3700-4200 | 80 | 60 | 26-28 | 3.2 |
| Warm White | FM-2016WLS-460Q-R80 | 2800-3200 | 80 | 60 | 24-26 | 3.2 |



3535 UV LED

3535 Series



Features:

- Ceramic PCB encapsulation, stable performance, high reliability.
- Low thermal resistance, good thermal dissipation.
- 365nm-405nm, can be used for curing, detecting and so on.
- Customized product available.
- Application: Nail lamp, 3D printer, Printing devices, Mothkilling lamp...
- Rated power: 1-3W

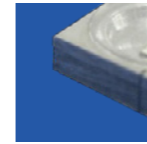
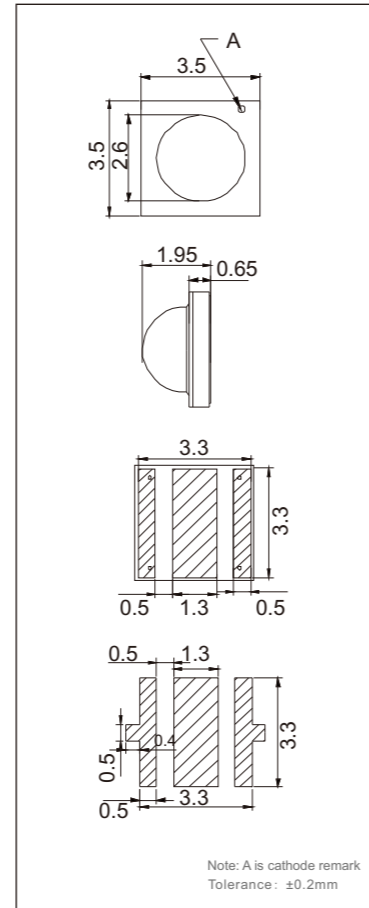
Absolute Maximum Ratings:

| Parameter | Symbol | Rating |
|--------------------------|-----------|------------|
| Forward Current | I_F | 700mA |
| Pulse Forwards Current*2 | I_{FP} | 1000mA |
| Reverse Voltage | V_R | 5V |
| Working Temperature | T_{OPR} | -30~+85°C |
| Storage Temperature | T_{STG} | -40~+100°C |

Parameter/Ta=25°C:

| Part number | λ_p (nm) | I_F (mA) TEST | P_o (mW) Typ. | V_F (V) Typ. |
|--------------|------------------|--------------------|--------------------|-------------------|
| FP-3535UV-BC | 395、405 | 350 | 500 | 3.3 |
| | | 350 | 650 | 3.45 |
| | | 500 | 920 | 3.6 |
| | | 700 | 1250 | 3.75 |
| | 385 | 350 | 580 | 3.45 |
| | | 500 | 830 | 3.6 |
| | | 700 | 1150 | 3.8 |
| | 375 | 350 | 450 | 3.6 |
| | | 500 | 620 | 3.8 |
| | 365 | 350 | 450 | 3.6 |
| | | 500 | 620 | 3.8 |

Dimensions/Unit:mm



6363 UV LED

6363 Series



Features:

- Metallic and inorganic packaged.
- Low thermal resistance, good thermal dissipation.
- 275-285nm, generally used as sterilization, disinfection and detection applications.
- Customized product available
- Application: Water purifying machine, Mothkilling lamp...
- Rated power: 0.1-0.2W.

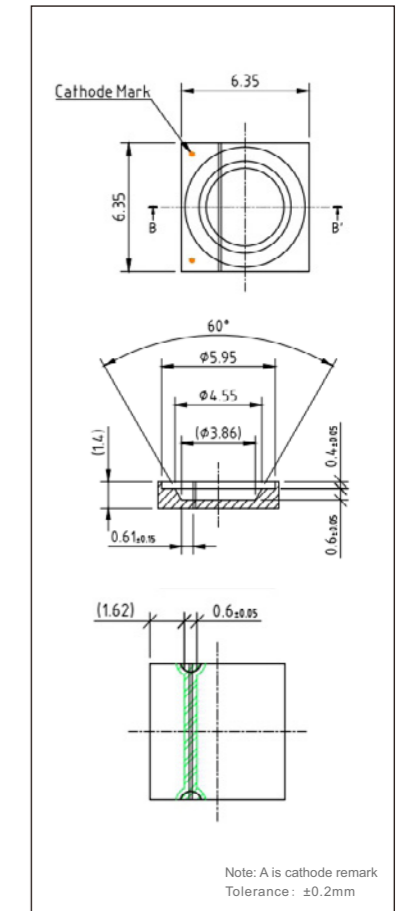
Absolute Maximum Ratings:

| Parameter | Symbol | Rating |
|--------------------------|-----------|------------|
| Forward Current | I_F | 40mA |
| Pulse Forwards Current*2 | I_{FP} | 60mA |
| Reverse Voltage | V_R | 7V |
| Working Temperature | T_{OPR} | -30~+85°C |
| Storage Temperature | T_{STG} | -40~+100°C |

Parameter/Ta=25°C:

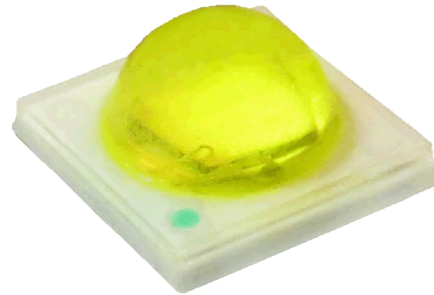
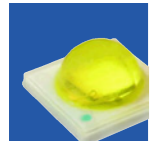
| Power | Part number | λ_p (nm) | I_F (mA) TEST | P_o (MW) Typ. | V_F (V) Typ. |
|-------|-----------------|------------------|--------------------|--------------------|-------------------|
| 0.1W | FP-6363UV-CM-BS | 275-285 | 20 | 1.3-1.7 | 5-6 |

Dimensions/Unit:mm



Flip Chip Power LED

3535 Series



Features:

- Ceramic PCB encapsulation, low thermal resistance.
- Ultra bright, with a high luminous efficiency over 140 lm/w.
- Rated power: 1-3W.



Absolute Maximum Ratings:

| Parameter | Symbol | Rating |
|--------------------------|-----------|------------|
| Forward Current | I_F | 1500mA |
| Pulse Forwards Current*2 | I_{FP} | 1500mA |
| Reverse Voltage | V_R | 5V |
| Working Temperature | T_{OPR} | -30~+85°C |
| Storage Temperature | T_{STG} | -40~+100°C |

Parameter/Ta=25°C:

| Type | Color | Part number | Color Temp (K) | CRI Ra Min | I_F (mA) TEST | Φ_V (lm) Typ. | V_F (V) Typ. |
|-----------|---------------|---------------------|----------------|------------|-----------------|--------------------|----------------|
| Flip Chip | Natural White | FP-3535CW-BCP-DS | 5600-6500 | 70 | 350 | 140 | 3.0 |
| Flip Chip | Neutral White | FP-3535NW-BCP-DS | 3700-4200 | 70 | 350 | 140 | 3.0 |
| Flip Chip | Warm White | FP-3535WW-BCP-DSR80 | 2800-3200 | 80 | 350 | 120 | 3.0 |

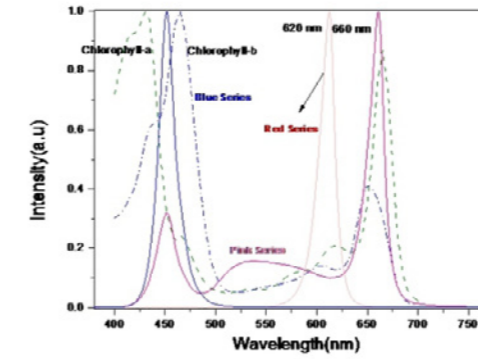
Grow-light TOP LED

P3528 Series



Features:

- 2835 package.
- Helpful in blossoming and fruiting, controlling the flower season.
- Rated power: 0.2W

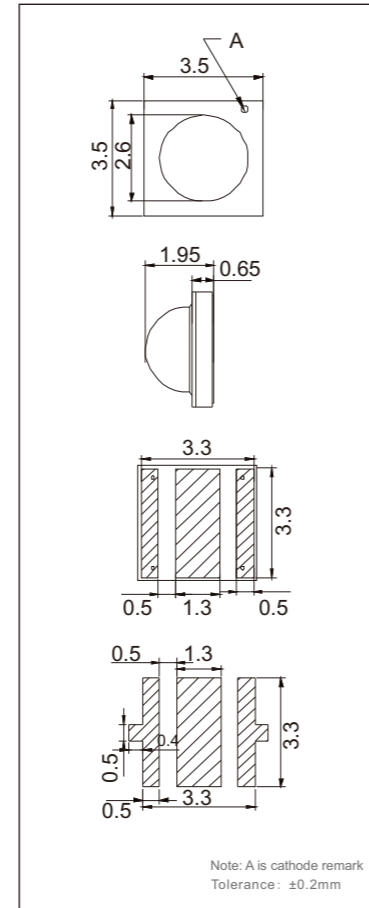


Chlorophyll-a and chlorophyll-b coefficient spectrum compare with luminescent spectrum of grow-light

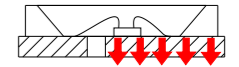
Parameter/Ta=25°C:

| Power | Color | Part number | Wavelength / X, Y Coordinate | Φ_V (lm) / Po(mW) | I_F (mA) | Voltage (V) |
|-------|-------|-----------------|------------------------------|------------------------|------------|-------------|
| 0.2W | Blue | FM-P3528BS-460T | 450nm | 3 Lm | 60 | 3.2 |
| 0.2W | Pink | FM-P3528WBRS-BS | (0.351,0.274) | 22 Lm | 60 | 5.4 |
| 0.2W | Red | FM-P3528RS-620Q | 620 nm | 8 Lm | 60 | 2.3 |

Dimensions/Unit:mm

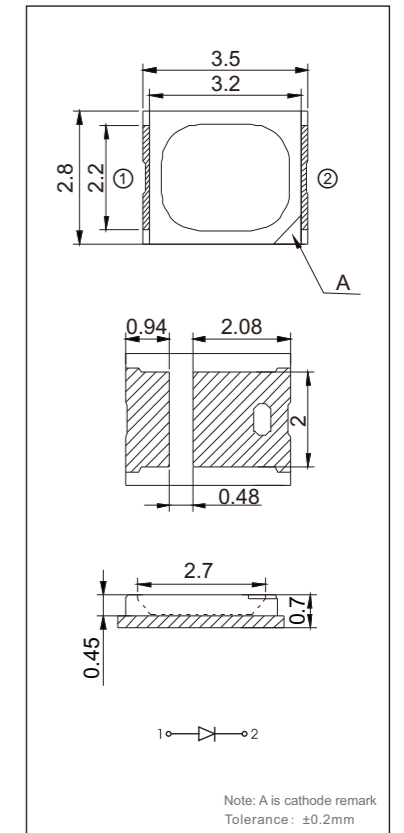


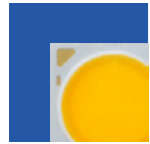
Thermal Dissipating Structure:



With a structure of the chip being placed on thermal pad the heat could be conducted to the PCB directly.

Dimensions/Unit:mm



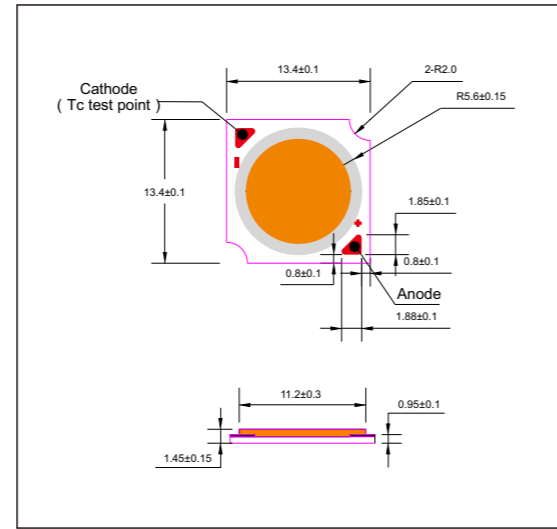


High-conductivity Metal PCB COB

P1313 Series



Dimensions/Unit:mm



Tolerance: ±0.2mm

Features:

- Use aluminum PCB with high reflective material.
- Applicable to downlight, spot light, ceiling light...
- Uniform high quality illumination, Erp/ANSI-compliant color binning structure with 3 / 4 SDCM options.
- Low-voltage and high-voltage DC options.
- Customized product available.
- Rated power: 7-24W.



Parameter/Ta=25°C (7-24W):

| Part number | Color Temp (K) | CRI Ra Min | Φv (lm) Typ. | I _F (mA) TEST | Voltage (V) | Power (W) |
|-----------------------|----------------|------------|----------------|--------------------------|-------------|-----------|
| MC-P1313CW-5W0121201 | 5700 | 80 | 570-630 | 120 | 34.2-42.5 | 8.5 |
| MC-P1313NW-5W0121201 | 4000 | 80 | 570-630 | 120 | 34.2-42.5 | 8.5 |
| MC-P1313WW-5W0121201 | 3000 | 80 | 547-605 | 120 | 34.2-42.5 | 8.5 |
| MC-P1313CW-12W0301202 | 5700 | 80 | 1260-1393 | 300 | 34.2-42.5 | 17 |
| MC-P1313NW-12W0301202 | 4000 | 80 | 1260-1393 | 300 | 34.2-42.5 | 17 |
| MC-P1313WW-12W0301202 | 3000 | 80 | 1206-1334 | 300 | 34.2-42.5 | 17 |
| MC-P1313CW-18W0451203 | 5700 | 80 | 1907-2107 | 450 | 34.2-42.5 | 25.5 |
| MC-P1313NW-18W0451203 | 4000 | 80 | 1907-2107 | 450 | 34.2-42.5 | 25.5 |
| MC-P1313WW-18W0451203 | 3000 | 80 | 1826-2018 | 450 | 34.2-42.5 | 25.5 |

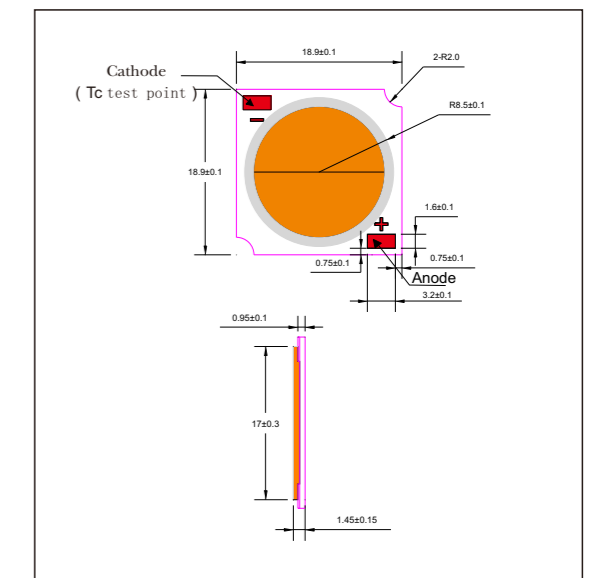


High-conductivity Metal PCB COB

P1919 Series



Dimensions/Unit:mm



Tolerance: ±0.2mm

Features:

- Use aluminum PCB with high reflective material.
- Applicable to track light, flood light, street light...
- Uniform high quality illumination, Erp/ANSI-compliant color binning structure with 3 / 4 SDCM options.
- Low-voltage and high-voltage DC options.
- Customized product available
- Rated power: 18-35W



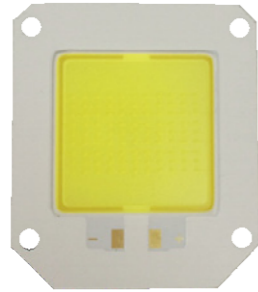
Parameter/Ta=25°C (18-35W):

| Part number | Color Temp (K) | CRI Ra Min | Φv (lm) Typ. | I _F (mA) TEST | Voltage (V) | Power (W) |
|-----------------------|----------------|------------|----------------|--------------------------|-------------|-----------|
| MC-P1919CW-24W0601204 | 5700 | 80 | 2520-2786 | 600 | 34.2-42.5 | 31.8 |
| MC-P1919NW-24W0601204 | 4000 | 80 | 2520-2786 | 600 | 34.2-42.5 | 31.8 |
| MC-P1919WW-24W0601204 | 3000 | 80 | 2413-2667 | 600 | 34.2-42.5 | 31.8 |
| MC-P1919CW-30W0751205 | 5700 | 80 | 3146-3478 | 750 | 34.2-42.5 | 42.5 |
| MC-P1919NW-30W0751205 | 4000 | 80 | 3146-3478 | 750 | 34.2-42.5 | 42.5 |
| MC-P1919WW-30W0751205 | 3000 | 80 | 3063-3386 | 750 | 34.2-42.5 | 42.5 |
| MC-P1919CW-35W0901206 | 5700 | 80 | 3775-4173 | 900 | 34.2-42.5 | 42.2 |
| MC-P1919NW-35W0901206 | 4000 | 80 | 3775-4173 | 900 | 34.2-42.5 | 42.2 |
| MC-P1919WW-35W0901206 | 3000 | 80 | 3677-4064 | 900 | 34.2-42.5 | 42.2 |



High-conductivity Metal PCB COB

P4046 Series

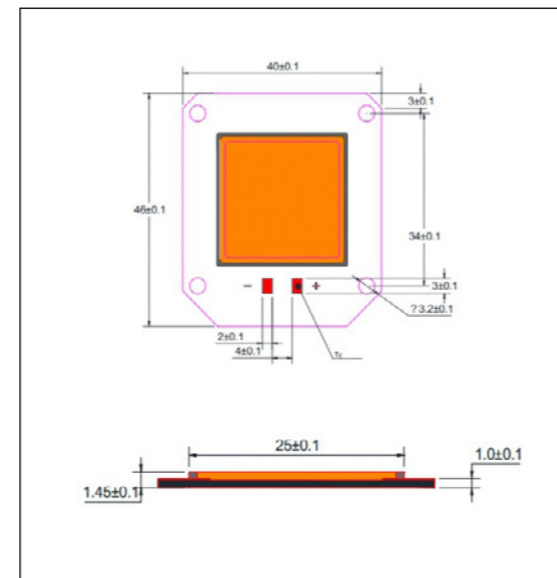


Features:

- Use aluminum PCB with high reflective material.
- Applicable to high bay light, flood light, street light...
- Low-voltage and high-voltage DC options.
- Customized product available.
- Rated power: 20-100W.



Dimensions/Unit:mm



Tolerance: ±0.2mm

Parameter/Ta=25°C:

| Part number | Color Temp (K) | CRI Ra Min | Φv (lm) Typ. | I _F (mA) TEST | Voltage (V) | Max Power (W) |
|------------------------|----------------|------------|--------------|--------------------------|-------------|---------------|
| MC-P4046CW-50W0453303 | 6000 | 80 | 5200-6100 | 450 | 94-115 | 62 |
| MC-P4046NW-50W0453303 | 4000 | 80 | 5000-5900 | 450 | 94-115 | 62 |
| MC-P4046WW-50W0453303 | 3000 | 80 | 4850-5750 | 450 | 94-115 | 62 |
| MC-P4046WW-100W1202308 | 3000 | 70 | 9500-11000 | 1200 | 68-75 | 110 |



LED Filament

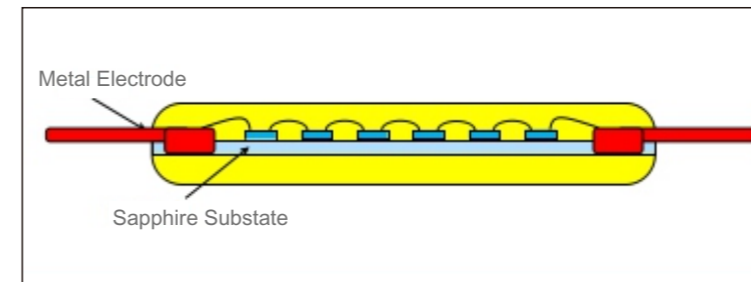


Features:

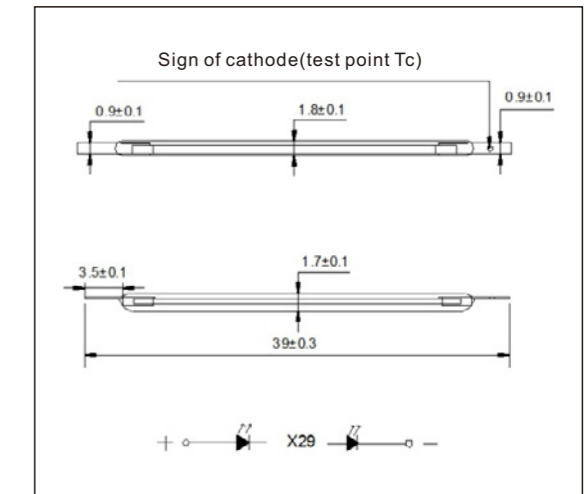
- 360° view angle.
- High CRI, high efficiency.
- High voltage and low current drive, with low power consumption and low light decay.
- As substitution to incandescent bulb.



Structure:



Dimensions/Unit:mm

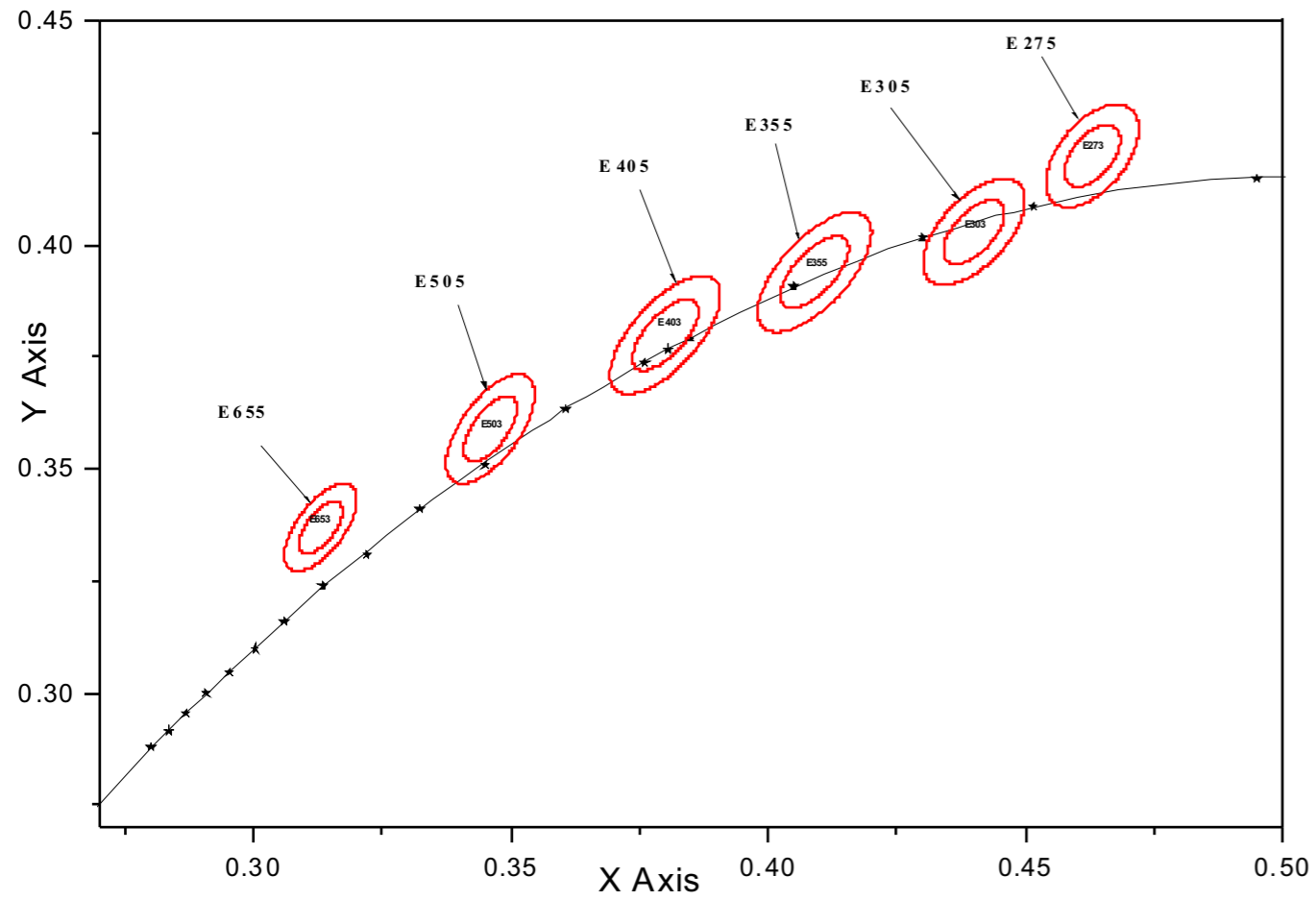


1. An excellent structural strength with sapphire coated by phosphor
2. excellent stability is achieved by seamless jointing of electrodes at two ends
3. encapsulated with heat-resisting material to ensure high reliability and low light failure
4. encapsulation with multi-chips, completely contact with air, good dissipation

Parameter/Ta=25°C:

| Part number | Color Temp (K) | CRI Ra Min | Φv (lm) Typ. | I _F (mA) TEST | Voltage (V) | Max Power (W) |
|------------------------|----------------|------------|--------------|--------------------------|-------------|---------------|
| MC-C0840RW-0.8W0012901 | 2700 | 80 | 130 | 10 | 78-82 | 0.8 |
| MC-C0840CW-1W0012601 | 6500 | 80 | 110 | 10 | 70-80 | 1 |
| MC-C0840RW-1.2W0015901 | 2700 | 80 | 205 | 15 | 78-82 | 1.2 |

ErP



1、(1) E655

| | CCT | X | Y | a | b | θ | Step |
|------|-----------|--------|--------|----------|----------|----------|------|
| E655 | 6050-6900 | 0.3130 | 0.3370 | 0.002206 | 0.000952 | 58.57 | 5 |

(2) E653

| | CCT | X | Y | a | b | θ | Step |
|------|-----------|--------|--------|----------|----------|----------|------|
| E653 | 6200-6700 | 0.3130 | 0.3370 | 0.002206 | 0.000952 | 58.57 | 3 |

2、(1) E505

| | CCT | X | Y | a | b | θ | Step |
|------|-----------|--------|--------|----------|----------|----------|------|
| E505 | 4700-5300 | 0.3460 | 0.3590 | 0.002737 | 0.001190 | 59.62 | 5 |

(2) E503

| | CCT | X | Y | a | b | θ | Step |
|------|-----------|--------|--------|----------|----------|----------|------|
| E503 | 4800-5150 | 0.3460 | 0.3590 | 0.002737 | 0.001190 | 59.62 | 3 |

3、(1) E405

| | CCT | X | Y | a | b | θ | Step |
|------|-----------|--------|--------|----------|----------|----------|------|
| E405 | 3800-4300 | 0.3800 | 0.3800 | 0.003129 | 0.001345 | 53.71 | 5 |

(2) E403

| | CCT | X | Y | a | b | θ | Step |
|------|-----------|--------|--------|----------|----------|----------|------|
| E403 | 3900-4200 | 0.3800 | 0.3800 | 0.003129 | 0.001345 | 53.71 | 3 |

4、(1) E355

| | CCT | X | Y | a | b | θ | Step |
|------|-----------|--------|--------|----------|----------|----------|------|
| E355 | 3280-3640 | 0.4090 | 0.3940 | 0.003090 | 0.001380 | 54.00 | 5 |

(2) E353

| | CCT | X | Y | a | b | θ | Step |
|------|-----------|--------|--------|----------|----------|----------|------|
| E353 | 3360-3530 | 0.4090 | 0.3940 | 0.003090 | 0.001380 | 54.00 | 3 |

5、(1) E305

| | CCT | X | Y | a | b | θ | Step |
|------|-----------|-------|-------|----------|---------|----------|------|
| E305 | 2820-3080 | 0.440 | 0.403 | 0.002782 | 0.00136 | 53.21 | 5 |

(2) E303

| | CCT | X | Y | a | b | θ | Step |
|------|-----------|-------|-------|----------|---------|----------|------|
| E303 | 2860-3020 | 0.440 | 0.403 | 0.002782 | 0.00136 | 53.21 | 3 |

6、(1) E275

| | CCT | X | Y | a | b | θ | Step |
|------|-----------|--------|--------|----------|----------|----------|------|
| E275 | 2630-2840 | 0.4630 | 0.4200 | 0.002578 | 0.001337 | 57.28 | 5 |

(2) E273

| | CCT | X | Y | a | b | θ | Step |
|------|-----------|--------|--------|----------|----------|----------|------|
| E273 | 2670-2790 | 0.4630 | 0.4200 | 0.002578 | 0.001337 | 57.28 | 3 |