



<http://atx-led.com>

P023R6-S slim 5 Inch
Low Voltage, dimmable
Surface Mounted LED
Direct Current Controlled

P023R6 series
ETL 5005242 (UL 1598 std)
Bright LEDs, Cool Operation



Product Description - surface mount driverless LED fixture

The P023R series of LED fixtures are **ETL listed** and IC rated for direct contact with insulation – recognizing it's cool operating temperatures and distributed heat (no hot spots). **Closet Rated** under NEC codes. **JA8 / Title 24** listed.

| Model | Voltage | Current | CCT | CRI | Lumens | Watts |
|--|---------|----------|---|-----|----------------|--------------------------------------|
| P023R6-S-mA-XX00K fixed or tunable white | 7.5-8 | 0-1000mA | 2700K 3000K 3500K 4000K 5000K | 90+ | 740 @ 660mA | 5.3w @660mA 8w @1000 mA |
| P023R6-S-48v7w-XX00K | 38-48v | 145 mA* | 3000K 3500K 4000K | 90+ | 900 | 6.5w @51v |
| P023R6-S-51v6w-XX00K | 40-54v | 115 mA* | 3000K 3500K 4000K | 90+ | 740 | 9.2w @51v |

*internally current limited

Technical specifications

| | | | |
|--------------------------|--|---|---|
| Case Color | Pure White – other colors available | | |
| Dimming Range | 0 to 100%, flicker free, no artifacts | | |
| CRI | CRI 90+ | | |
| Lm/watt | Up to 120 | | |
| Color Temperature | 6 fixed options available plus tunable white | | |
| Model | P023R6-S-mA | P023R6-S-51v 6w | P023R6-S-48v 7w |
| Operating mode | Current Mode | Voltage Mode | Voltage Mode |
| Operating Voltage | 7.5 to 8.3 volts 5.3 w @ 660 mA 8.3 w @ 1000 mA 0-1000 mA | Dimming: 45-48v Full: 48 to 54 volts | Dimming: 40:43v Full: 44 to 45 volts |
| Internal Current Limiter | | 18C6B 115 mA | 15C8B 125 mA |
| Wattage | | 6 w @ 51v | 6 w @ 45v 7w @ 48v |
| Operating current | | 0 to 115 mA | 0 to 125mA |
| Wiring Method | Series | Parallel | |
| Dimming method | Signature Perfect | None or PWM or Central | DR2 or Central |
| Color Temp | CCT 2700-5000K | Fixed, see options | |
| Operating Temperature | Ceiling mount, -20 to 50 Deg C non condensing | | |
| IP Rating | Suitable for Damp environments | | |
| IC Rated | Surface Mount | | |
| LM-80 tested | 10,000 hours | | |
| LED type | 2835 long life | | |
| Closet Rated | Suitable for use within Closet storage spaces when installed per NEC requirements. See https://atxled.com/Closets for more info | | |
| Motion Sensor | See P023R6-M for motion sensing | | |

Light engine - 120 LED chips for the most light



shown without diffuser

5 inch diameter





Snap In Surface Mounting

5 Inch diameter

13/16 below Surface

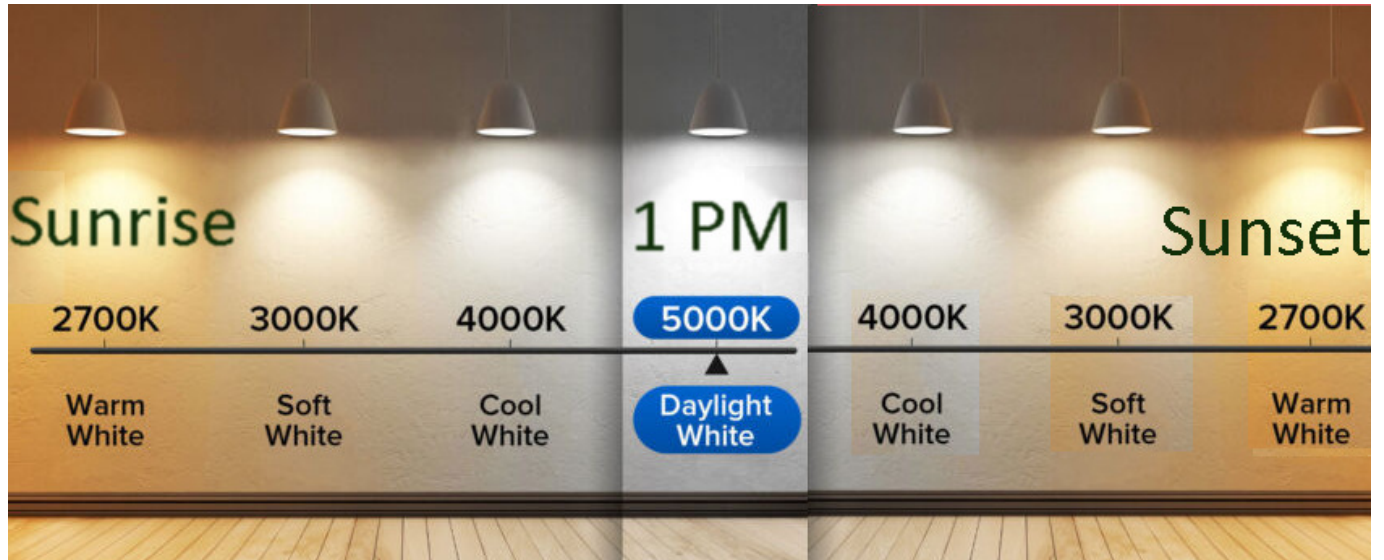
5/8 above Surface

125 mm diameter

20.5 + 16mm total height



Color Temperature options

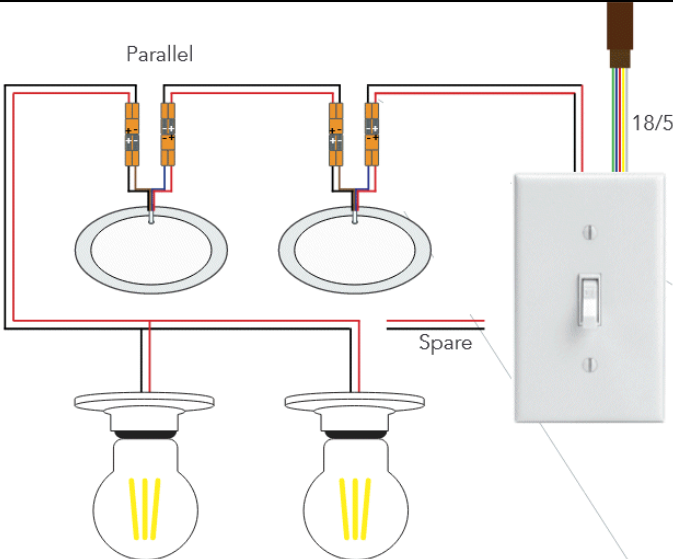
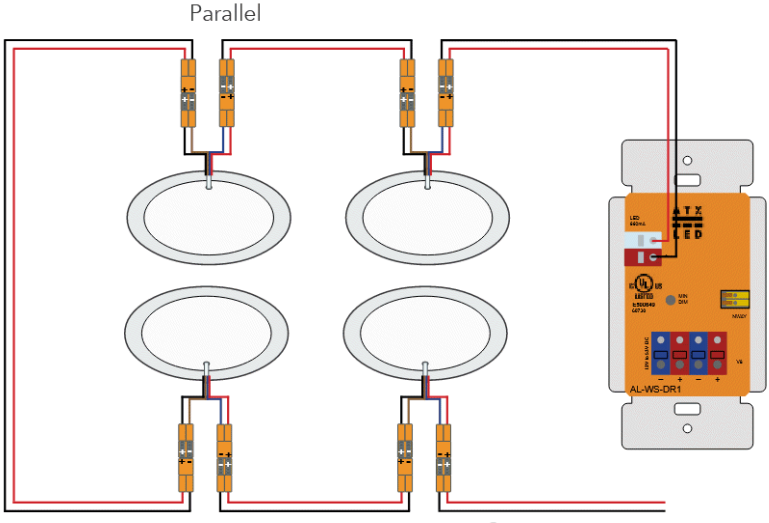
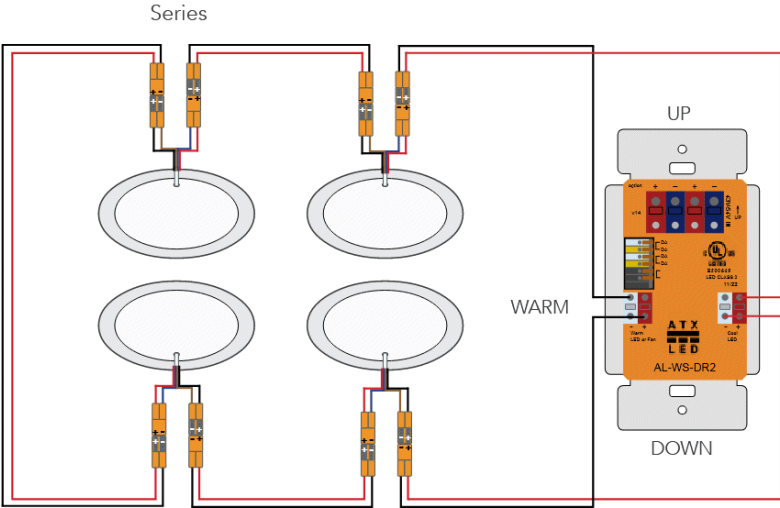


Optional Time of Day lighting rhythm

Available in 6 different color temperatures, these fixtures can be operated as a fixed color, or tunable white fixture. Any 660 mA current source can be used. Up to 5 fixtures can be wired in series to share one driver. That driver can be located up to 150 ft from the LEDs – since constant current eliminates the concerns about voltage drop. This 6 watt device can be installed as either tunable white or fixed color. Connecting both inputs in parallel will generate the 3850K color. .

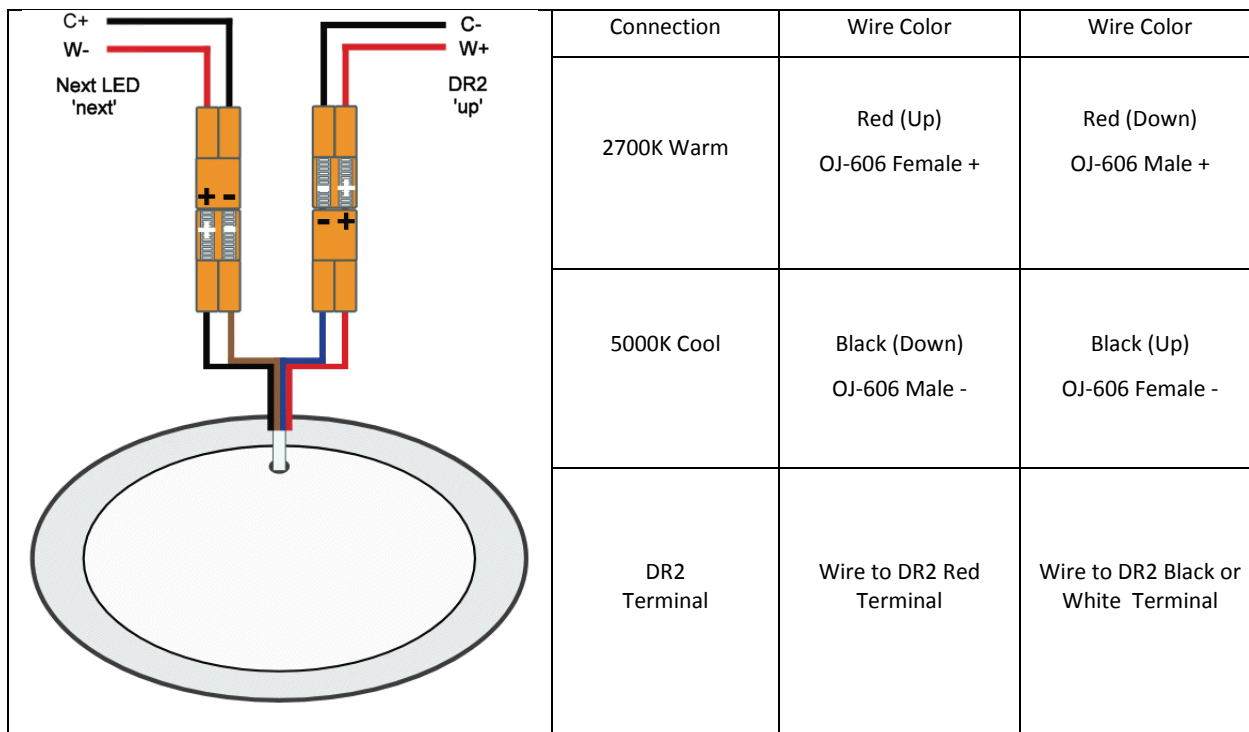
X= Stock, * = on request, X² = wiring option of CCT

| Model | 2700 | 3000 | 3500 | 3850 | 4000 | 5000 |
|-------|----------------|------|------|----------------|------|----------------|
| CCT | X -----> X | | | | | |
| Fixed | X ² | X | X | X ² | * | X ² |

| | |
|---|---|
|  <p>Parallel</p> <p>18/5</p> <p>Spare</p> <p>Lights shown are P023R6-48V6W and E26-48V6W</p> | <p>Value</p> <p>On/OFF</p> <p>parallel</p> |
|  <p>Parallel</p> <p>Spare</p> | <p>Local / Upgrade</p> <p>Dimming</p> <p>Series or Parallel</p> |
|  <p>Series</p> <p>UP</p> <p>WARM</p> <p>DOWN</p> | <p>Signature</p> <p>Perfect Dimming</p> <p>660 mA</p> <p>Series</p> |

Tunable White (CCT) Wiring detail

Tunable White series LED wiring is implemented with just one pair of wire
OJ-606 type connector AWG 18 or 20 2 pin



Recommended DC 660 mA Drivers with dimming*

N = # of P023R6-S

| DC drivers * | Fixed Color | Tunable White | WiFi | DALI |
|--------------|-------------|---------------|------|------|
| AL-WS-DR1 | 5 | | | |
| AL-WS-DR1P/D | 5 | | | |
| AL-WS-DR2 | 10 | 5 | | Yes |
| AL-WS-DR2C | 10 | 5 | | |
| AL-WS-DR2W | 10 | 5 | Yes | |
| LDD-600H | 5 | | | |
| LDD-600HDA | 5 | | | Yes |

*51 volt DC input to the AL-WS-DRx

Examples of AC Drivers with Dimming

N = # of current mode LEDs

| AC drivers from 120 / 240 vac to DC currents | Fixed Color | Tunable White | 0-10v | DALI | DMX |
|--|----------------|---------------|----------|----------|----------|
| SRP-2305-75 | 10 | | | X | |
| SRP-2309-75CCT | | 5 | | X | |
| WP-80-40A-2AM | 8 | 4 | X | | |
| DP4-EC / DP5-E | 16 | 5 | | | X |

Examples of AC Drivers without Dimming

N = # of 51v6w LEDs

| AC drivers from 120 / 240 vac to DC currents | Fixed Color | Tunable White | 0-10v | DALI | DMX |
|--|----------------|---------------|-------|------|-----|
| AL-PS-51v96w | 16 | | | | |

Other LED Products from ATX LED

