

Rectangle-Z LED-module

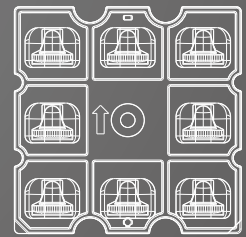
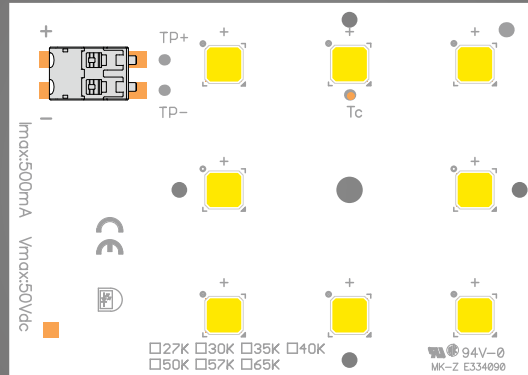
MK5050-8H1-50B-48V-24W-7049R5-20048

MANKUN

Manufacturer Of LED Lighting Solution

| | | | | | | |
|--------------------------|--------------------------------|-------------------|--------------------|------------------|-----------------------|-------------|
| OSRAM on board | System Effizienz 190lm/W | CRI 70+ | 120° Beam angle | 5SDCM MacAdam | SMD Terminal Block | 0.34-0.75mm |
|--------------------------|--------------------------------|-------------------|--------------------|------------------|-----------------------|-------------|

constant CURRENT ESD RoHS Zhaga



8H1 FLOOD LIGHT LENSES OF DARKOO.

DARKOO[®]
Optics

APPLICATIONS



PRODUCT DESCRIPTION

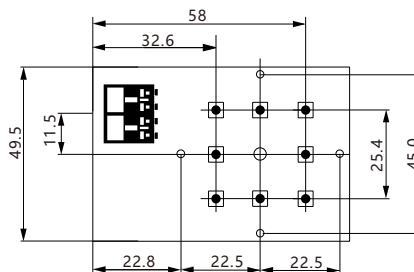
- Color temperatures (3000 K, 4000 K, and 5000K)
- CRI>80 (CRI90 Available on request)
- Perfect for existing or new lamps
- LED module efficiency of up to 190 lm/W
- Excellent color consistency of 5 SDCM
- Best in class reliability testing for OEM peace of mind
- Long life-time: 50,000 hours
- High module efficiency for fixture performance
- Wide operating thermal range
- Optical flexibility via third party lenses
- Instant full light



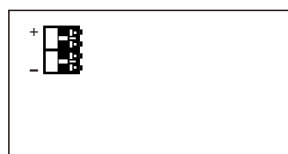
SPECIFIC TECHNICAL DATA

- Dimension MCPCB 70*49.5mm
- PCB Thickness 1.6mm
- Beam characteristic 120°
- Power Factor > 0.9
- Ambient temperature Ta: -25°C ...+ 55°C
- Module temperature Tc max. 85°C
- Performance temperature Tp 75°C
- Type of mounting M3 screws
- Wire cross section 0.2...0.75mm²
- 30 g net weight per module
- MOQ 750 PC/NTC.
- Posibilidad de integrar LOGO Custom

DIMENSIONS (All dimensions in mm).



Wiring - Cablaggio



Ordering data

| Commercial product name | PCS/TNC | MEAS | G.W.(KG) |
|------------------------------|---------|---------------|----------|
| DK5050-70X49.5-5050-8LED-730 | 750 | 510*370*250mm | 16.3KG |
| DK5050-70X49.5-5050-8LED-740 | 750 | 510*370*250mm | 16.3KG |
| DK5050-70X49.5-5050-8LED-750 | 750 | 510*370*250mm | 16.3KG |

Ordering data

| Parameter | Nominal | Life** | Max*** | Unit |
|------------------------------|---------|--------|--------|------|
| DK5050-70X49.5-5050-8LED-7xx | 350 | 700 | 1500 | mA |

Module temperatures

| Parameter | Nominal | Life** | Max*** | Unit |
|-----------------------------------|---------|--------|--------|------|
| Tc (case temperature at Tc point) | 45 | 75 | 85 | °C |

* Nominal value at which typical performance is specified

** Value at which life time is specified

*** Maximum value for safe operation, do not operate above this value



Specific technical data

| Type | Typ. luminous flux at tp = 25 °C | Typ. luminous flux at tp = 65 °C | Typ. Colour temperature (CCT) | Colour rendering index CRI | Min. forward voltage at tp = 65 °C | Max. forward voltage at tp = 25 °C | Typ. forward current | Typ. power consumption at tp = 65 °C | Max. forward current | Efficacy of the module at tp = 25 °C | Efficacy of the module at tp = 65 °C |
|--------------|----------------------------------|----------------------------------|-------------------------------|----------------------------|------------------------------------|------------------------------------|----------------------|--------------------------------------|----------------------|--------------------------------------|--------------------------------------|
| MK5050-20048 | 3,600lm | 3,288lm | 3,000K | >70 | 41.6V | 50.8V | 510mA | 24.0W | 1200mA | 150lm/W | 137lm/W |
| | 4,320lm | 3,840lm | | | | | 640mA | 32.0W | | 135lm/W | 120lm/W |
| | 5,263lm | 4,651lm | | | | | 800mA | 40.8W | | 129lm/W | 114lm/W |
| | 4,560lm | 4,200lm | 510mA | | | | 24.0W | 190lm/W | | 175lm/W | |
| | 5,440lm | 4,960lm | 4,000K | | | | 640mA | 32.0W | | 170lm/W | 155lm/W |
| | 6,609lm | 6,079lm | 800mA | | | | 40.8W | 162lm/W | | 149lm/W | |
| | 4,560lm | 4,200lm | 510mA | | | | 24.0W | 190lm/W | | 175lm/W | |
| | 5,440lm | 4,960lm | 5,000K | | | | 640mA | 32.0W | | 170lm/W | 155lm/W |
| | 6,609lm | 6,079lm | 800mA | | | | 40.8W | 162lm/W | | 149lm/W | |

*Charts presenting module's Tc and current Vs expected lifetime (Up to 100,000 hours), as well as module's Tc and current Vs expected lumen depreciation (L70 and above) are available via your sales representative.
 Note: The lumen output is specified at board level (lens optical losses not included).
 When using standard Fortimo Fastflex lenses, optical losses of 4% need to be taken into account.
 Note: LUXEON maintains a tolerance of ± 7% on luminous flux, ± 2 on CRI measurements and ± 5% on CCT measurements.

Precautions for Use

Chemical Substances

Certain chemical substances listed below may harm LED modules by causing corrosions which result in reduced luminous flux, color shift, and no light output in the worst case. Please use caution when storing LED modules and designing the luminaire system so that LED modules are not exposed to such chemical substances.

- Examples of harmful chemical substances: Sulfur, chlorine, phthalate, halogen, VOCs (volatile organic compound)
- Example sources of harmful chemical substances: Organic rubber, corrugated paper, lead solder paste, epoxy

When designing a sealed luminaire, one must use silicone based sealing instead of rubber based ones and make sure that there is no source of harmful chemical in the luminaire.

Do not store LED modules with corrugated paper or rubber. It is recommended that LED modules be stored in aluminum moisture barrier bag or PE (Polyethylene) bag together with silica gel.

ESD

This LED module is sensitive to electrostatic discharge. Please handle the module in an environment with appropriate ESD protection measures.

DC Polarity

There is no reverse polarity protection. Please use caution and do not drive the module in reverse polarity. It can damage the module.

Constant Current

This LED module must be driven by constant current LED drivers. Constant voltage driver may damage the module.

LED Handling

LED is a delicate component. Do not touch or apply pressure on the yellow light emitting window of LEDs. This may damage the LED causing no light output.