

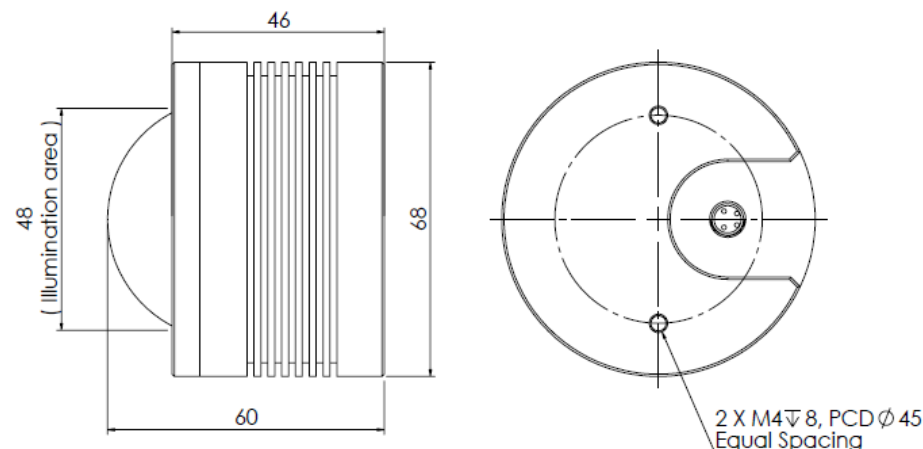
High Brightness Spot Light

FHSP-Si80

Lighting Picture



Lighting Dimension



| Mechanical Information | |
|---------------------------|------------------------------|
| Casing Material | Aluminium + Glass lens |
| Storage Temperature Range | Temp 0-35°C, Humidity 20-85% |
| Weight | 412 g |
| Lighting Dimension, ØxH | Ø68.0 x 60.0mm |
| IP Rating | IP 55 |

Unit in mm




FHSP-Si80

| Optical Information | | | | |
|------------------------------|--|-----------|----------|--------------|
| Led Color | Red (R24) | GREEN (G) | BLUE (B) | WHITE (W) |
| Wavelength, CIE coordinate | 850nm | 525nm | 470nm | xy=0.31,0.32 |
| Illumination (number of LED) | 12 | 21 | 21 | 21 |
| Illumination Area, Ø | Ø48mm | | | |
| Led Package | SMD | | | |
| Eye Safety (EN 62471:2008) | RG-2 (Moderate Risk): Caution. Do not stare at exposed lamp in operation. May be harmful to eyes | | | |

| Electrical Information | R24 | G/B/W |
|--|--|---|
| Lighting Supply Voltage (constant voltage mode) | 24V ± 2% | |
| Supply Ripple Voltage | ≤ Vs ± 5% | |
| Reverse Battery Protection | YES | |
| Lighting Forward voltage (for zero internal resistor value) | 22.8 V | 21.0 V |
| Continuous Current | 0.35A (MAX) | 1.05A (MAX) |
| Power Consumption (constant voltage mode) | 8.40 W | 25.20 W |
| Lighting casing temperature, Operating after 60 minutes in continuous mode | 55°C | 55°C |
| Strobe Mode Specification | R24 | G/B/W |
| Max. Lighting Supply Voltage (Constant voltage power supply) | Pulsing at 24VDC to 40VDC, 0-10% Duty Cycle Recommended at 36VDC | Pulsing at 24VDC to 40VDC, 0-10% Duty Cycle Recommended at 36VDC |
| Pulse Current, (Max. 10msec) (Constant current power supply) | 0.88A (MAX) (PULSE ONLY) | 2.63A (MAX) (PULSE ONLY) |
| Constant Current Power Supply Voltage Level | 23.8V (1.0V higher than the lighting Vf) | 22.0V (1.0V higher than the lighting Vf) |
| Max. Trigger Pulse Duration, msec | 10 msec | |
| Duty Cycle | 0 to 10% | |
| Over Driving Mode | | |
| Constraints | Major constraint in over current mode is tremendous heat generated on the lighting and results the led in permanent damage | |
| Maximum Current, (Constant current power supply) | 0.70A (MAX) Ordering Option (FHSP-Si80-xxxx-0) | 2.10A (MAX) Ordering Option (FHSP-Si80-xxxx-0) |
| Constant Current Power Supply Voltage Level | 23.8V (1.0V higher than the lighting Vf) | 22.0V (1.0V higher than the lighting Vf) |
| Max. Turn On Duration, sec | 10 Sec | |
| Duty Cycle | 50% | |
| Over driving in Constant voltage Mode | Ordering Option (FHSP-Si80-xxxx-2) | |



| Ordering Option | |
|-----------------------|---|
| FHSP-Si80-R24/G/B/W | With resistor to limit the current (Use in both constant voltage/ current power supply) |
| FHSP-Si80-R24/G/B/W-0 | Internal resistor value= zero ohms (only use in constant current power supply) |
| FHSP-Si80-R24/G/B/W-2 | Driving in 2x current with build in internal resistor (Use in both constant voltage/ current power supply) |

| Connection | | R24/G/B/W | |
|---|----------------|----------------------|---|
| Connector Type: | Pico M8 (Male) | | |
| Cable Length out from lighting: | N/A | | |
| Pin Configuration: Pico M8 (Male) | Pin | Light Segment | Börsig /Binder P/N: 79-3382-52-04 Wire Color |
|  | 1 | LED 1 + | Brown |
| | 2 | N.C. | --- |
| | 3 | LED 1 - | Blue |
| | 4 | N.C. | --- |

| Additional Information | | R24/G/B/W |
|---|--|-----------|
| Additional Cooling Method | 1. | |
| Life span in continuous mode | 20,000 hours (drop to 50% intensity) at 25°C | |
| Life span in strobe light mode Lighting drop to 50% intensity (at 25°C ambient temperature) | Est. >50,000 hours (drop to 50% intensity) at 25°C | |
| Intensity Controller Selection | PSA-Series, PSD-Series, LIC-Series | |
| CE Conformity | YES | |
| RoHS Compliance | YES | |
| ISO 9001:2008 | SG11/03751 | |

| Application | |
|---------------------------------|---|
| Optimal Working Distance | 10-1000mm |
| Optimize the lighting Life Span | 1. It is recommended to turn ON the lighting only during image capturing or conjunction with camera exposure time. This will enable the lighting to work with longer life span and prevent overheating and resulting damage to the led. |

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