## Diffuse Back Light

## [ $\ddagger$ FLFL-Si160X40

## Lighting Picture

## Lighting Dimension



| Optical Information |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Led Color | RED (R/R24) | InfraRed (IR/IR24) | GREEN (G) | BLUE (B) | WHITE (W) |
| Wavelength | 626nm | 850nm | 525nm | 470nm | $\mathrm{xy}=(0.31,0.32)$ |
| Illumination (number of LED) | 100 | 112 | 112 | 112 | 112 |
| Illumination Area | $160 \times 40 \mathrm{~mm}$ |  |  |  |  |
| Led Package | SMD |  |  |  |  |
| Eye Safety (EN 62471:2008) | Exempt Group |  |  |  |  |


| Electrical Information | R | IR | R24 | IR24 | G/B/W |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lighting Supply Voltage (constant voltage mode) | $12 \mathrm{~V} \pm 2 \%$ |  | $24 \mathrm{~V} \pm 2 \%$ |  |  |
| Supply Ripple Voltage | $\leq \mathrm{Vs} \pm 5 \%$ |  |  |  |  |
| Reverse Battery Protection | YES |  |  |  |  |
| Typical Lighting Forward voltage, Vf (for zero internal resistor value) | 11.0 V | 9.8 V | 22.0 V | 21.0 V | 21.0 V |
| Continuous Current | 0.80A (MAX) | 0.40A (MAX) | 0.40A (MAX) | 0.20A (MAX) | 0.48 A (MAX) |
| Power Consumption | 9.60 W | 4.80 W | 9.60 W | 4.80 W | 11.52 W |
| Lighting casing temperature, Operating after 60 minutes | $53^{\circ} \mathrm{C}$ | $41^{\circ} \mathrm{C}$ | $53^{\circ} \mathrm{C}$ | $41^{\circ} \mathrm{C}$ | $57^{\circ} \mathrm{C}$ |


| Strobe Mode Specification | R | IR | R24 | IR24 | G/B/W |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Max. Lighting Supply Voltage (Constant voltage power supply) | Pulsing at 12VDC to 24VDC, 0-10\% Duty Cycle Recommended at 15VDC |  | Pulsing at 24VDC to 48VDC, 0-10\% Duty Cycle Recommended at 36VDC |  |  |
| Pulse Current, (Max. 10msec) (Constant current power supply) | 2.00A (MAX) | 1.00A (MAX) | 1.00A (MAX) | 0.50A (MAX) | 1.20A (MAX) |
| Max. Trigger Pulse Duration, msec | 10 msec |  |  |  |  |
| Duty Cycle | 0-10\% |  |  |  |  |

## Ordering Option

FLFL-Si160X40-R/R24/IR/IR24/G/B/W
With resistor to limit the curren
(Use in both constant voltage/ current power supply)
Internal resistor value= zero ohms
FLFL-Si160X40-R/R24/IR/IR24/G/B/W-0
(only use in constant current power supply)



Life span in continuous mod
Life span in strobe light mode
Lighting drop to $50 \%$ intensity
(at $25^{\circ} \mathrm{C}$ ambient temperature)
Intensity Controller Selection
CE Conformity
RoHS Compliance
ISO 9001:2008

R/R24/G/B/W/IR/IR24

## Application

Optimal Working Distance
$10-100 \mathrm{~mm}$

## Disclaimer

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