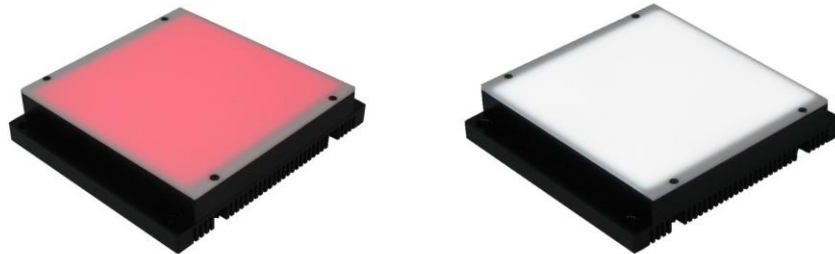


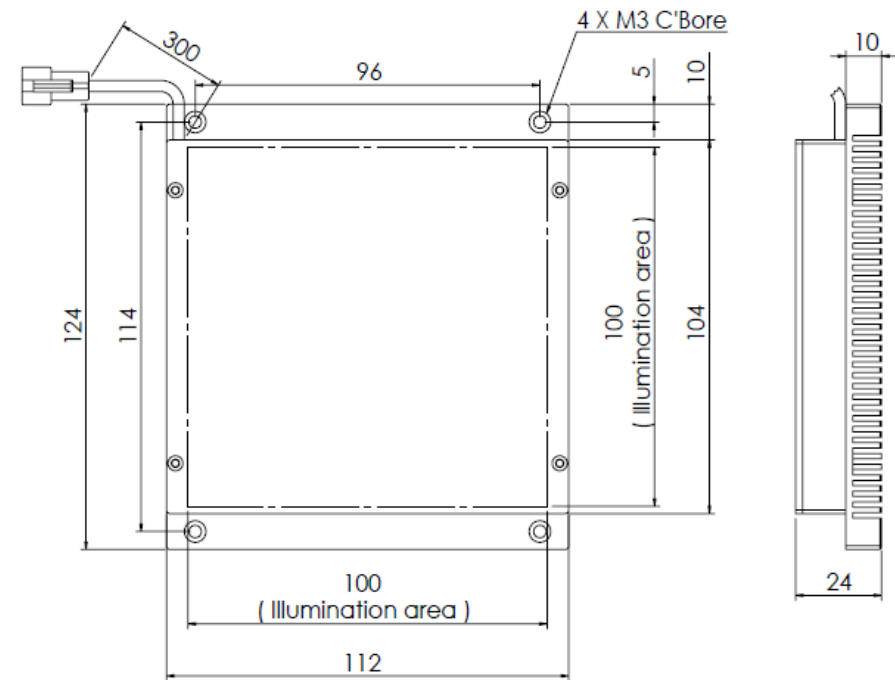
High Brightness Diffuse Back Light

FLDL-TP-Si100

Lighting Picture



Lighting Dimension



| Mechanical Information | |
|---------------------------|------------------------------|
| Casing Material | Aluminium + Diffuser |
| Storage Temperature Range | Temp 0-35°C, Humidity 20-85% |
| Weight | 363g |
| Lighting Dimension, WxLxH | 112.0 x 124.0 x 24.0 mm |
| IP Rating | IP 50 |




| Optical Information | | | | | |
|------------------------------|--------------|--------------------|-----------|----------|----------------|
| Led Color | RED (R/R24) | InfraRed (IR/IR24) | GREEN (G) | BLUE (B) | WHITE (W) |
| Wavelength | 626nm | 850nm | 525nm | 470nm | xy=(0.31,0.32) |
| Illumination (number of LED) | 225/240 | 225 | 225 | 225 | 225 |
| Illumination Area | 100 x 100 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) | 12V ± 2% | | 24V ± 2% | | |
| Supply Ripple Voltage | ≤ Vs ± 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 | 1.80A (MAX) | 0.80A (MAX) | 0.96A (MAX) | 0.38A (MAX) | 0.64A (MAX) |
| Power Consumption | 21.60 W | 9.60 W | 23.04 W | 9.00 W | 15.36 W |
| Lighting casing temperature, Operating after 60 minutes | 65°C | 55°C | 71°C | 55°C | 54°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) | 4.50A (MAX) | 2.00A (MAX) | 2.40A (MAX) | 0.94A (MAX) | 1.60A (MAX) |
| Max. Trigger Pulse Duration, msec | 10 msec | | | | |
| Duty Cycle | 0 - 10% | | | | |

| Ordering Option | |
|-------------------------------------|---|
| FLDL-TP-Si100-R/R24/IR/IR24/G/B/W | With resistor to limit the current (Use in both constant voltage/ current power supply) |
| FLDL-TP-Si100-R/R24/IR/IR24/G/B/W-0 | Internal resistor value= zero ohms (only use in constant current power supply) |



| Connection | | R/IR | | | R24/IR24/G/B/W | | | | | | |
|---------------------------------|-----|-------------|--|---|----------------|-----|---|--|-------------|--|--|
| Connector Type (Default): | | JST SMR-02V | |  | JST SMR-03V | |  | | | | |
| | Pin | Signal | | Cable Color | | Pin | Signal | | Cable Color | | |
| | 1 | LED + | | Black/White | | 1 | LED + | | Black/White | | |
| | 2 | LED - | | Black | | 2 | N.C. | | --- | | |
| | | | | | | 3 | LED - | | Black | | |
| Cable Length out from lighting: | | 300 mm | | | | | | | | | |

| Additional Information | | R/R24/IR/IR24/G/B/W | |
|---|--|--|--|
| Additional Cooling Method | | Attached to machine part for better heat dissipation | |
| Life span in continuous mode | | 20,000 hours | |
| Life span in strobe light mode Lighting drop to 50% intensity (at 25°C ambient temperature) | | 50,000 hours | |
| Intensity Controller Selection | | PSA-Series, PSD-Series, LIC-Series | |
| CE Conformity | | YES | |
| RoHS Compliance | | YES | |
| ISO 9001:2008 | | SG11/03751 | |

| Application | |
|--------------------------|----------|
| Optimal Working Distance | 5-100 mm |



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