



### Diffuse Back Light

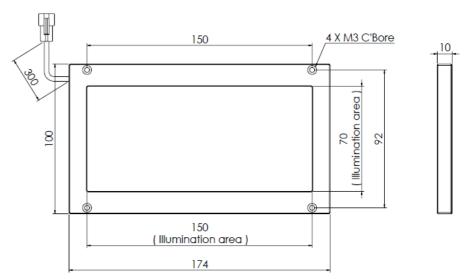
# **FLFL-Si150X70**

### **Lighting Picture**





| Mechanical Information    |                              |
|---------------------------|------------------------------|
| Casing Material           | Aluminium + Arcylic          |
| Storage Temperature Range | Temp 0-35°C, Humidity 20-85% |
| Weight                    | 280 g                        |
| Lighting Dimension, WxLxH | 100.0 x 174.0 x 10.0 mm      |
| IP Rating                 | IP50                         |



All unit in mm





| Optical Information          |             |                    |              |          |                |  |
|------------------------------|-------------|--------------------|--------------|----------|----------------|--|
| Led Color                    | RED (R/R24) | InfraRed (IR/IR24) | GREEN (G)    | BLUE (B) | WHITE (W)      |  |
| Wavelength                   | 640nm       | 850nm              | 525nm        | 470nm    | xy=(0.31,0.32) |  |
| Illumination (number of LED) | 120         | 126/120            | 126          | 126      | 126            |  |
| Illumination Area            | 150 x 70 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  | 0.96A (MAX) | 0.45A (MAX) | 0.48A (MAX) | 0.20A (MAX) | 0.54A (MAX) |  |
| Power Consumption   | 11.52 W     | 5.40 W      | 11.52 W     | 4.80 W      | 12.96 W     |  |
| Lighting casing temperature, Operating after 60 minutes                 | 60°C        | 38°C        | 60°C        | 38°C        | 54°C        |  |

| Strobe Mode Specification                                       | R              | IR                       | R24                                      | IR24        | G/B/W       |  |
|---|----------------|--------------------------|--|-------------|-------------|--|
| Max. Lighting Supply Voltage                                    | Pulsing at 12V | DC to 24VDC,             | Pulsing at 24VDC to 48VDC,               |             |             |  |
| (Constant voltage power supply)                                 |                | uty Cycle<br>ed at 15VDC | 0-10% Duty Cycle<br>Recommended at 36VDC |             |             |  |
| Pulse Current, (Max. 10msec)<br>(Constant current power supply) | 2.40A (MAX)    | 1.13A (MAX)              | 1.20A (MAX)                              | 0.50A (MAX) | 1.35A (MAX) |  |
| Max. Trigger Pulse Duration, msec                               | 10 msec        |                          |  |             |             |  |
| Duty Cycle  | 0 - 10%        |                          |  |             |             |  |

| Ordering Option                     |  |
|-------------------------------------|--|
| FLFL-Si150X70-R/R24/IR/IR24/G/B/W   | With resistor to limit the current                   |
| FLFL-31130X70-K/K24/IK/IK24/G/B/W   | (Use in both constant voltage/ current power supply) |
| FLFL-Si150X70-R/R24/IR/IR24/G/B/W-0 | Internal resistor value= zero ohms                   |
| FLFL-31130X70-R/R24/IR/IR24/G/B/W-0 | (only use in constant current power supply)          |





| Connection                      |     | R/IR    |     |             | R24/IR24/G/B/W |         |      |             |
|---------------------------------|-----|---------|-----|-------------|----------------|---------|------|-------------|
| Connector Type (Default):       | JST | SMR-02V |     |             | JST            | SMR-03V | - My | 4           |
|                                 | Pin | Sigr    | nal | Cable Color | Pin            | Sig     | inal | Cable Color |
|                                 | 1   | LED     | ) + | Black/White | 1              | LEI     | ) +  | Black/White |
|                                 | 2   | LEC     | ) - | Black       | 2              | N.      | .C.  |             |
|                                 |     |         |     |             | 3              | LE      | D -  | Black       |
| Cable Length out from lighting: |     |         |     | 300         | mm             |         |      |             |

| Additional Information         | R/R24/G/B/W/IR/IR24                                  |
|--------------------------------|--|
| 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 | 50,000 hours   |
| (at 25°C ambient temperature)  |  |
| Intensity Controller Selection | PSA-Series, PSD-Series, LIC-Series                   |
| CE Conformity                  | YES  |
| RoHS Compliance                | YES  |
| ISO 9001:2008                  | SG11/03751   |

| Application              |           |
|--------------------------|-----------|
| Optimal Working Distance | 10-100 mm |





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