

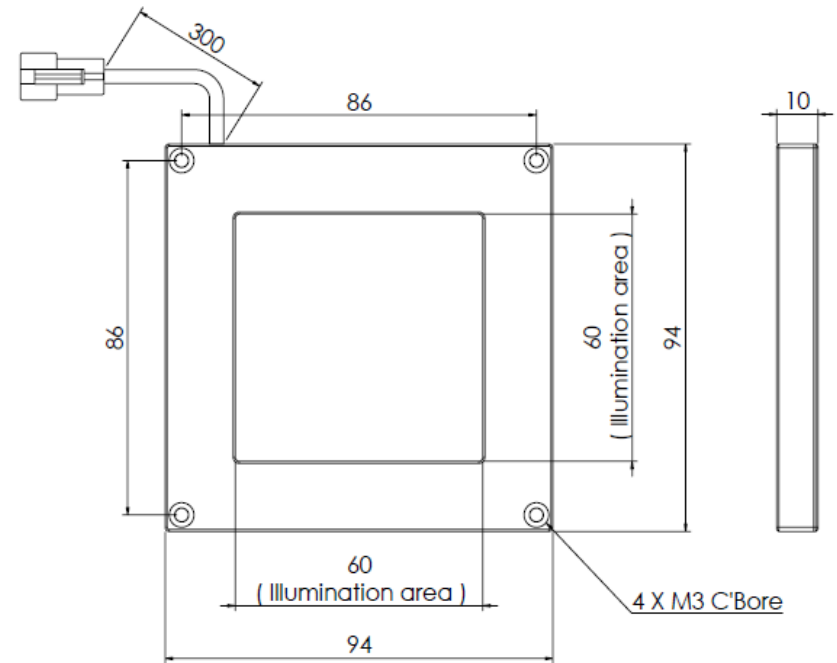
# Diffuse Back Light

## FLFL-Si60

### Lighting Picture



### Lighting Dimension



Mechanical Information	
Casing Material	Aluminium + Arcylic
Storage Temperature Range	Temp 0-35°C, Humidity 20-85%
Weight	160 g
Lighting Dimension, WxLxH	94.0 x 94.0 x 10.0 mm
IP Rating	IP50

All unit in mm

Optical Information					
Led Color	RED (R/R24)	InfraRed (IR24)	GREEN (G)	BLUE (B)	WHITE (W)
Wavelength	640nm	850nm	525nm	470nm	xy=(0.31,0.32)
Illumination (number of LED)	64	64	56	56	56
Illumination Area	60 x 60 mm				
Led Package	SMD				
Eye Safety (EN 62471:2008)	Exempt Group				

Electrical Information	R	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)	8.8 V	17.6 V	22.4 V	21.0 V
Continuous Current	0.64A (MAX)	0.32A (MAX)	0.10A (MAX)	0.24A (MAX)
Power Consumption	7.68 W	7.68 W	2.40 W	5.76 W
Lighting casing temperature, Operating after 60 minutes	60°C	60°C	39°C	62°C

Strobe Mode Specification	R	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)	1.60A (MAX)	0.80A (MAX)	0.25A (MAX)	0.60A (MAX)
Max. Trigger Pulse Duration, msec	10 msec			
Duty Cycle	0 - 10%			

Ordering Option	
FLFL-Si60-R/R24/IR24/G/B/W	With resistor to limit the current (Use in both constant voltage/ current power supply)
FLFL-Si60-R/R24/IR24/G/B/W-0	Internal resistor value= zero ohms (only use in constant current power supply)

Connection		R			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/G/B/W/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 (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	10-100 mm

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