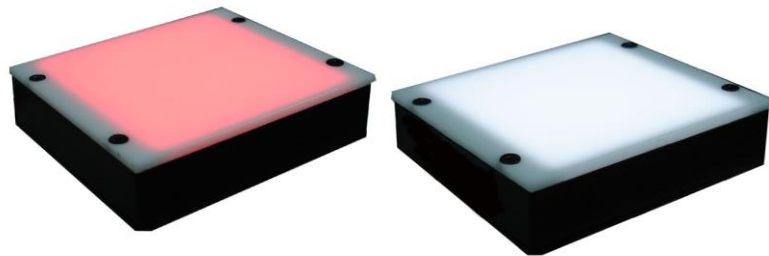


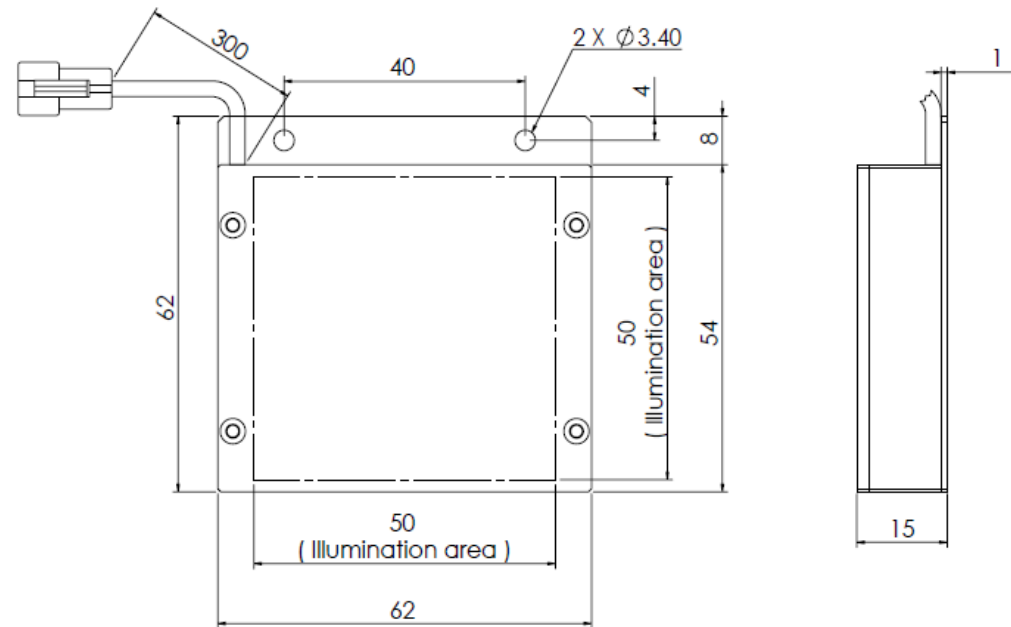
# High Brightness Diffuse Back Light

## FLDL-TP-Si51

### Lighting Picture



### Lighting Dimension



Mechanical Information	
Casing Material	Aluminium + Diffuser
Storage Temperature Range	Temp 0-35°C, Humidity 20-85%
Weight	75g
Lighting Dimension, WxLxH	62.0 x 62.0 x 15.0 mm
IP Rating	IP 50

Unit in mm





Optical Information					
Led Color	RED (R/R24)	InfraRed (IR24)	GREEN (G)	BLUE (B)	WHITE (W)
Wavelength	626nm	850nm	525nm	470nm	xy=(0.31,0.32)
Illumination (number of LED)	80	90	90	90	90
Illumination Area	50 x 50 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)	11.0 V	22.0 V	21.0 V	18.0 V
Continuous Current	0.64A (MAX)	0.32A (MAX)	0.15A (MAX)	0.30A (MAX)
Power Consumption	7.68 W	7.68 W	3.60 W	7.20 W
Lighting casing temperature, Operating after 60 minutes	65°C	75°C	65°C	65°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)	1.60 A (MAX)	0.80A (MAX)	0.38A (MAX)	0.75A (MAX)
Max. Trigger Pulse Duration, msec	10 msec			
Duty Cycle	0 - 10%			

Ordering Option	
FLDL-TP-Si51-R/R24/IR24/G/B/W	With resistor to limit the current (Use in both constant voltage/ current power supply)
FLDL-TP-Si51-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/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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