

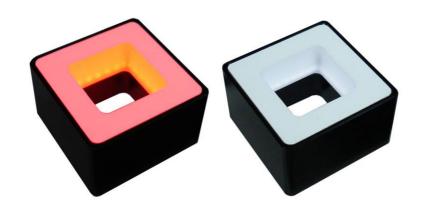


## Low Angle Square Diffuse Light

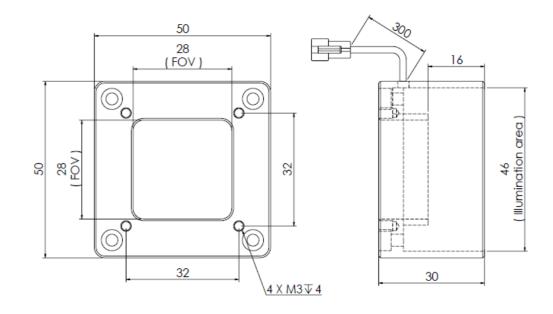
# FFPQ-Si50

## **Lighting Picture**

### **Lighting Dimension**



Mechanical Information	
Casing Material	Aluminum + Acrylic
Storage Temperature Range	Temp 0-35°C, Humidity 20-85%
Weight	100g
Lighting Dimension, WxLxH	50.0 x 50.0 x 30.0 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)	32	32	36	36	36	
Illumination Area	46 x 46 mm					
Led Package			SMD			
Eye Safety (EN 62471:2008)			Exempt Group			

Electrical Information	R	R24	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)	8.8V	17.6V	22.4V	18.0V			
Continuous Current	0.32A (MAX)	0.16A (MAX)	0.05A (MAX)	0.12A (MAX)			
Power Consumption	3.84 W	3.84 W	1.20 W	2.88 W			
Lighting casing temperature, Operating after 60 minutes	55°C	55°C	55°C	48°C			

Strobe Mode Specification	R	R24	G/B/W				
Max. Lighting Supply Voltage	Pulsing at 12VDC to 24VDC, Pulsing at 24VDC to 48VDC,						
(Constant voltage power supply)	0-10% Duty Cycle	Duty Cycle 0-10% Duty Cycle					
	Recommended at 15VDC	Recommended at 36VDC					
Pulse Current, (Max. 10msec)	0.80A (MAX)	0.404 (MAX)	0.13A (MAX)	0.30A (MAX)			
(Constant current power supply)	0.80A (MAX) 0.40A (MAX) 0.13A (MAX) 0.30A (MAX)						
Max. Trigger Pulse Duration, msec	10 msec						
Duty Cycle	0 - 10%						

Ordering Option	
FFPQ-Si50-R/R24/IR24/G/B/W	With resistor to limit the current
FFQ-3150-R/R24/IR24/G/D/W	(Use in both constant voltage/ current power supply)
FFPQ-Si50-R/R24/IR24/G/B/W -0	Internal resistor value= zero ohms
FFR-3130-R/R24/IR24/G/B/W -0	(only use in constant current power supply)







Connection	R			R24/IR24/G/B/W				
Connector Type (Default):	JST	SMR-02V			JST	SMR-03V	1	7
	Pin	Sigr	nal	Cable Color	Pin	Sig	nal	Cable Color
	1	LED	) +	Black/White	1	LEI	) +	Black/White
	2	LED - Bla		Black	2	N.C.		
					3	LE	D -	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	0-20 mm







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