



# Low Angle Square Diffuse Light

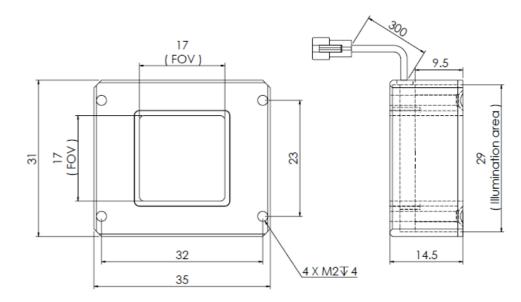
# **FFPQ-Si31X35**

### **Lighting Picture**

## **Lighting Dimension**



Mechanical Information	
Casing Material	Aluminum + Acrylic
Storage Temperature Range	Temp 0-35°C, Humidity 20-85%
Weight	23g
Lighting Dimension, WxLxH	35.0 x 31.0 x 14.5 mm
IP Rating	IP 50



Unit in mm





Optical Information							
Led Color	RED (R/R24)	GREEN (G12)	BLUE (B12)	WHITE (W12)	GREEN (G)	BLUE (B)	WHITE (W)
Wavelength	626nm	525nm	470nm	xy=(0.31,0.32)	525nm	470nm	xy=(0.31,0.32)
Illumination (number of LED)	12/20	12	12	12	12	12	12
Illumination Area		29 x 29 mm					
Led Package		SMD					
Eye Safety (EN 62471:2008)	Exempt Group						

Electrical Information	R G12/B12/W12		R24	G/B/W		
Lighting Supply Voltage	12V ±	2%	24V ± 2%			
(constant voltage mode)						
Supply Ripple Voltage	≤ Vs ± 5%					
Reverse Battery Protection	YES					
Typical Lighting Forward voltage, Vf	8.8 V	9.0 V	22.0 V	18.0 V		
(for zero internal resistor value)	0.0 V	3.0 V	22.0 V	10.0 V		
Continuous Current	0.12A (MAX) 0.08A (MAX)		0.08A (MAX)	0.04A (MAX)		
Power Consumption	1.44 W	0.96 W	1.92 W	0.96 W		
Lighting casing temperature,	46°C	39°C	54°C	40°C		
Operating after 60 minutes	40 C	39 C	54 C	40 C		

Strobe Mode Specification	R	G12/B12/W12	R24	G/B/W	
Max. Lighting Supply Voltage	Pulsing at 12V	DC to 24VDC,	Pulsing at 24VDC to 48VDC,		
(Constant voltage power supply)	0-10% Duty Cycle		0-10% Duty Cycle		
	Recommend	led at 15VDC	Recommended at 36VDC		
Pulse Current, (Max. 10msec)	0.204 (MAY)	0.204 (MAX)	0.204 (MAY)	0.104 (MAX)	
(Constant current power supply)	0.30A (MAX) 0.20A (MAX)		0.20A (MAX)	0.10A (MAX)	
Max. Trigger Pulse Duration, msec	10 msec				
Duty Cycle			0 - 10%		

Ordering Option	
FFPQ-Si31X35-R/R24/G12/B12/W12/G/B/W	With resistor to limit the current (Use in both constant voltage/ current power supply)
FFPQ-Si31X35-R/R24/G12/B12/W12/G/B/W-0	Internal resistor value= zero ohms (only use in constant current power supply)





Connection	R/G12/B12/W12			R24/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/G12/B12/W12/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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Form No: SOP-7.3.3 / Rev 1.5 / Date: 2015-05-20 FFPQ-Si31x35