

# High Brightness Spot Light

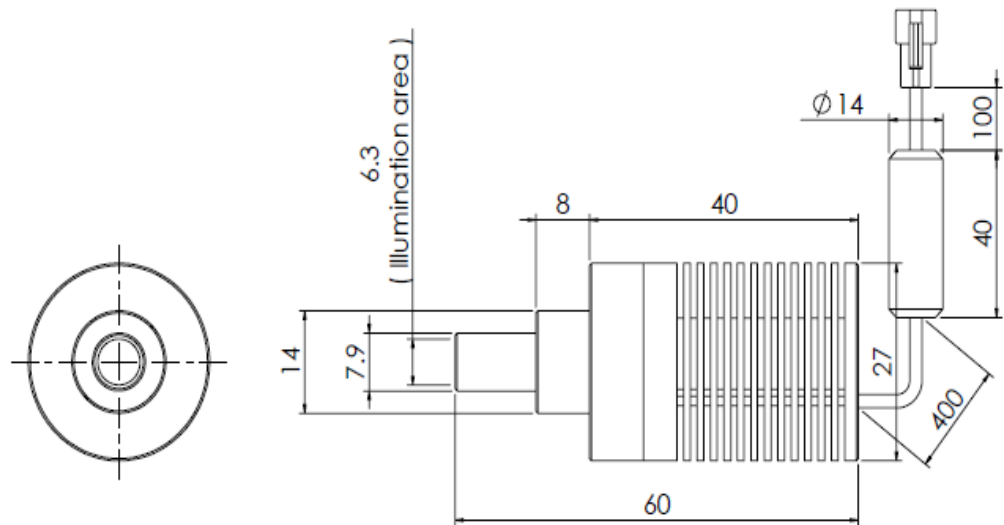


## FHLV-Si27N2

### Lighting Picture



### Lighting Dimension



Unit in mm

Mechanical Information	
Casing Material	Aluminium + Acrylic
Weight	50 g
Operating Temperature	0°C to 40°C, Humidity 20%-85%
Storage Temperature	-20°C to 60°C, Humidity 20%-85%
Lighting Dimension, ØxH	Ø27.0 x 60.0 mm



Led Colour	RED(R/R24)	INFRARED (IR)	GREEN(G/G12)	BLUE (B/B12)	WHITE (W/W12)
<b>Optical Information</b>					
Wavelength / Color temperature	630nm	850nm	535nm	485nm	xy=(0.31,0.32)
Illumination (Number of LED)	1				
Illumination Area	Ø6.3mm				
Led Package	SMD				
Eye Safety (EN 62471:2008)	RG-2 (Moderate Risk): Caution. Do not stare at exposed lamp in operation. May be harmful to eyes.				Exempt Group

Continuous Mode	Voltage Drive (With Resistor)				Current Drive (Without Resistor)	
	R	IR/G12/B12/W12	R24	G/B/W	R/R24	IR/G/B/W
Max. Lighting Supply Voltage	12 VDC ± 2%		24 VDC ± 2%		2.2 VDC ± 2%	3VDC ± 2%
Typical Lighting Forward Voltage (Vf)	2.2V	3.0V	2.2V	3.0V	2.2V	3.0V
Max. Current	0.35A (MAX)				0.35A(MAX)	
Max. Power	0.77W	1.05W	0.77W	1.05W	0.77W	1.05W



Strobe Mode	Voltage Drive		Current Drive	
	R/IR/G12/B12/W12	R24/G/B/W	R/R24	IR/G/B/W
Max. Lighting Supply Voltage	Pulsing at 12VDC to 24 VDC, Recommended at 15VDC	Pulsing at 24VDC to 48VDC, Recommended at 36VDC	Pulsing at 2.2VDC	Pulsing at 3VDC
Max. Current	0.88A (MAX)		0.88A (MAX)	
Max. Trigger Pulse Duration	10 msec			
Duty Cycle	< 10%			



Ordering Part Number	Controller Type	Description
FHLV-Si27N2-R/R24/IR/G12/B12/W12/G/B/W	Voltage Drive	With Resistor (Use in both constant voltage/ current power supply)
FHLV-Si27N2-R/R24/IR/G12/B12/W12/G/B/W-0	Current Drive	Without Resistor (0 Ohm) (Only use in constant current power supply)

External Resistor part number	Vs=5VDC		Vs=12VDC				Vs=24VDC			
	Strobe/Continuous		Strobe		Continuous		Strobe		Continuous	
	Driving with (0.35 A)	Driving with (0.70 A)	Driving with (0.35 A)	Driving with (0.70 A)	Driving with (0.35 A)	Driving with (0.70 A)	Driving with (0.35 A)	Driving with (0.70 A)	Driving with (0.35 A)	Driving with (0.70 A)
R / IR	FRB-i8.2	FRB-i3.3	FRB-i27	FRB-i15	FRB-i27C	FRB-i15C	N/A	N/A	N/A	N/A
G12/B12/W12	FRB-i5.1	FRB-i2.7	FRB-i22	FRB-i12	FRB-i22C	FRB-i12C	N/A	N/A	N/A	N/A
R24 / G/B/W	N/A	N/A	N/A	N/A	N/A	N/A	FRB-i56	FRB-i27	FRB-i56C	FRB-i27C
FRB-i8.2 / FRB-i3.3 / FRB-i5.1 / FRB-i2.7 / FRB-i27 / FRB-i15 / FRB-i22 / FRB-i12 / FRB-i56 / FRB-i27										
FRB-i27C / FRB-i15C/ FRB-i22C / FRB-i12C / FRB-i56C										
No resistor needed if lighting work with constant current controller										



Connection	R/IR/G12/B12/W12			R24/IR24/G/B/W		
Connector Type (Default):	JST SMR-02V (Male)			JST SMR-03V (Male)		
	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	540 mm					

Additional Information	Details
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
Supply Ripple Voltage	$\leq V_s \pm 5\%$
Reverse Battery Protection	YES
Cooling Method	Natural air-cooling
Additional Cooling Method	Attached to machine part for better heat dissipation
Intensity Controller Selection	PSA-Series, PSD-Series, LIC-Series
CE Conformity	YES
ISO 9001:2015	MY11/00845



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