

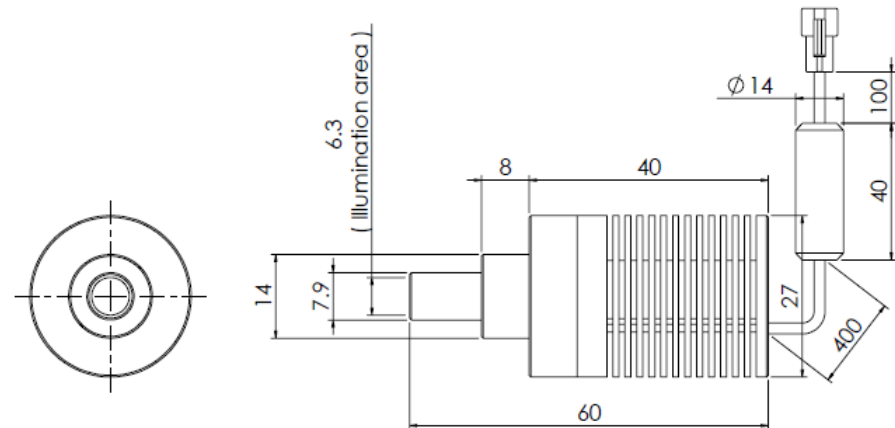
High Brightness Spot Light

 **FHLV-Si27N2**

Lighting Picture



Lighting Dimension



Mechanical Information	
Casing Material	Aluminum + Acrylic
Storage Temperature Range	Temp 0-35°C, Humidity 20-85%
Weight	50 g
Lighting Dimension, ØxH	Ø27.0 x 60.0mm
IP Rating	IP 50

Unit in mm




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


Electrical Information	R	IR	G12/B12/W12	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)	2.2 V	3.0 V	3.0 V	2.2 V	3.0 V
Continuous Current	0.35A (MAX)	0.35A (MAX)	0.35A (MAX)	0.35A (MAX)	0.35A (MAX)
Power Consumption	0.77 W	1.05 W	1.05 W	0.77 W	1.05 W
Lighting casing temperature, Operating after 60 minutes	35°C	38°C	39°C	37°C	40°C

Strobe Mode Specification	R	IR	G12/B12/W12	R24	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)	0.88A (MAX)	0.88A (MAX)	0.88A (MAX)	0.88A (MAX)	0.88A (MAX)
Constant Current Power Supply Voltage Level	3.2V (1V higher than lighting Vf)	4.0V (1V higher than lighting Vf)	4.0V (1V higher than lighting Vf)	3.2V (1V higher than lighting Vf)	4.0V (1V higher than lighting Vf)
Max. Trigger Pulse Duration, msec	10 msec				
Duty Cycle	0 - 10%				
Over Driving Mode	R/IR/G12/B12/W12/R24/G/B/W				
Constraints	Major constraint in over current mode is tremendous heat generated on the lighting and results the led in permanent damage.				
Maximum Current, (Constant current power supply)	0.7A (MAX)				
Constant Current Power Supply Voltage Level	(1.0V higher than the lighting Vf)				
Max. Turn On Duration, sec	10 Sec				



Duty Cycle	50%
Ordering Option	
FHLV-Si27N2-R/IR/G12/B12/W12/R24/G/B/W	Lighting come with no internal resistor

Accessories Option	R/IR		G12/B12/W12	
	Vs=5VDC	Vs=12VDC	Vs=5VDC	Vs=12VDC
External Resistor part number, Driving with (0.35 A)	FRB-i8.2	FRB-i27	FRB-i5.1	FRB-i22
External Resistor part number, Driving with (0.70 A)	FRB-i3.3	FRB-i15	FRB-i2.7	FRB-i12
	No resistor needed if lighting work with constant current controller			

Connection	R/IR/G12/B12/W12			R24/G/B/W		
Connector Type (Default):	JST SMR-02V			JST SMR-03V		
Cable Length out from lighting:	540mm					
Pin Configuration:	Pin	Signal	Cable Color	Pin	Signal	Cable
	1	LED +	Black/White	1	LED +	Black/White
	2	LED -	Black	2	LED -	---
	3			3	N.C.	Black

Additional Information	R/IR/G12/B12/W12/R24/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



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