

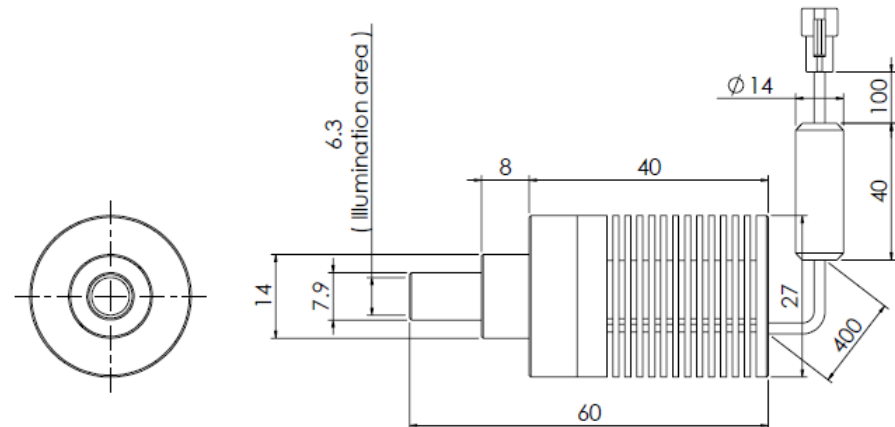
# High Brightness Spot Light

## 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, ØxL	Ø27.0 x 60 mm
IP Rating	IP 50

Unit in mm




Optical Information				
Led Color	RED (R/R24)	GREEN (G12)	BLUE (B12)	WHITE (W12)
Wavelength	630nm	535nm	485nm	xy=(0.31,0.32)
Illumination (number of LED)	1/1	1	1	1
Illumination Area, Diameter Ø	Ø6.3 mm			
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.			


Electrical Information	R	G12/B12/W12	R24
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	2.2 V
Continuous Current	0.35A (MAX)	0.35A (MAX)	0.35A (MAX)
Power Consumption	0.77 W	1.05 W	0.77 W
Lighting casing temperature, Operating after 60 minutes	35°C	39°C	37°C

Strobe Mode Specification	R	G12/B12/W12	R24
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)
Constant Current Power Supply Voltage Level	3.2V (1V higher than lighting Vf)	4.0V (1V higher than lighting Vf)	3.2V (1V higher than lighting Vf)
Max. Trigger Pulse Duration, msec	10 msec		
Duty Cycle	0 - 10%		
Over Driving Mode	R/G12/B12/W12/R24		
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)	0.7 A (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/W12/G12/B12/R24	Lighting come with no internal resistor

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

Additional Information		R/G12/B12/W12/R24		
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	50,000 hours			
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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