



[WWW.GOQ.KR](http://WWW.GOQ.KR)

MODEL : GOQ 4 LED  
(WHITE)



## < Characteristic >

Most Preferred Best seller LED module : CE, UL, RoHS Certified

Power Consumption : 2.16W

LED provided by SAMSUNG

SMD LED mounted : Made in Korea

LED Driver : Constant Voltage Driving System

Max. 50 modules in series

Fabricated with a CAP TYPE Optical Lens

Each unit can be used to cut.

Best Viewing Angle : **150°**

## < Enhanced Function >

Stylish Appearance design : CAP TYPE

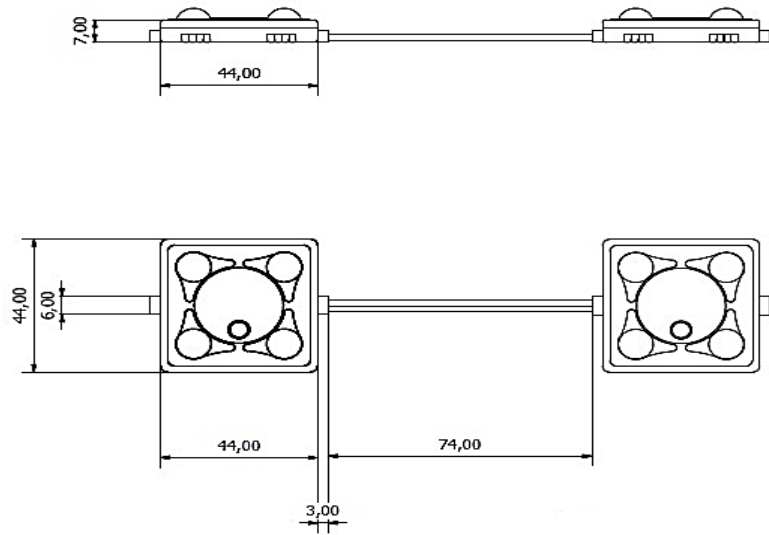
Design for Humid & Waterproof : IP68

Easy Installation & Maintenance

## < Applications >

- \* Normal size Channel letters
- \* Flex light Box illumination
- \* Duplex light Box illumination

## < Dimension >



## < Specification >

Item	Value	Unit
Product No.	GOQ 4 LED(WHITE)	
Power Consumption	2.16	Watt
Input Voltage	12	VDC
Input Current	180	mA
View Angle	150	°
Luminous intensity	160	lm(Typ.)
CRI	80	%
Module Pitch	80	mm
Size	44 X 44 X 9.0	mm
Weight	11	g
Max. in Series	50	EA
Operating Temp	- 30 ~ 85	°C
Storage Temp	- 40 ~ 100	°C
Waterproof	IP68	
Cable	UL, 20AWG 300V/80°C	
Case materials	UL, ABS, V0-class	
Lens materials	UL, SAN, V0-class	

# < LED Specification >



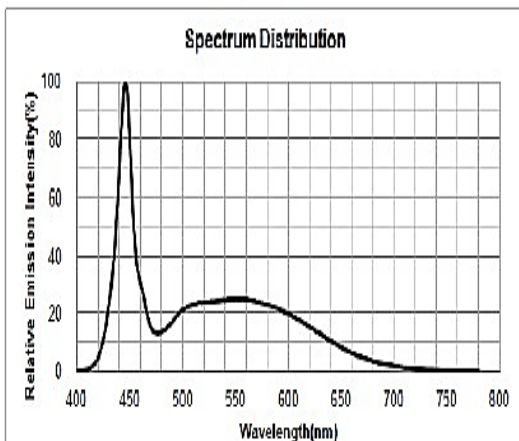
## Absolute Maximum Ratings

Item	Symbol	Rating	Condition
Operating temperature range	T <sub>op</sub>	-40℃ ~ +85℃	-
Storage temperature range	T <sub>stg</sub>	-40℃ ~ +120℃	-
LED junction temperature	T <sub>J</sub>	110℃	-
Forward Current	I <sub>F</sub>	150 mA	-
Peak Pulsed Forward Current	I <sub>FP</sub>	300 mA	Duty 1/10 pulse width 10ms
Thermal resistance	R <sub>th, j-s</sub>	16℃/W	Junction to solder point
Assembly Process Temperature	-	260℃, < 10sec	-
ESD	-	5kV	HBM

## Characteristics

Item	Unit	Nominal CCT	Product Code	Rank	Min	Typ	Max
Forward Voltage <sup>1)</sup> (V <sub>F</sub> ) (@85 mA, T <sub>s</sub> = 25℃)	V	-	-	AZ	2.70	-	2.80
				A1	2.80	-	2.90
				A2	2.90	-	3.00
				A3	3.00	-	3.10
				A4	3.10	-	3.20
Luminous Intensity <sup>2)</sup> (I <sub>v</sub> ) (@85 mA, T <sub>s</sub> = 25℃)	lm	10000K	*WAAUS0	S0	24.0	-	31.5
Reverse Voltage (@5 mA, T <sub>s</sub> = 25℃)	V	-	-	-	0.7	-	1.2

## Spectrum (T<sub>s</sub>=25℃)



## Viewing Radiation Characteristics

