OptoSupply
Light It Up

4.5W 12V COB Violet Star LED

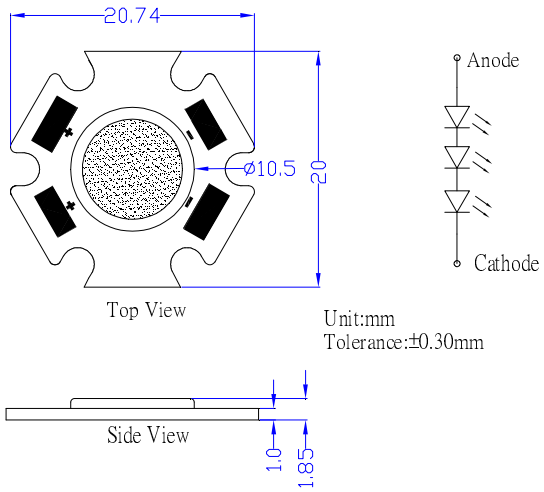
OSV5X3CAC1E

Ver.0

▪Features

- Highest luminous flux
- Super energy efficiency
- Very long operating life
- Superior UV Resistance

▪Outline Dimension



▪Applications

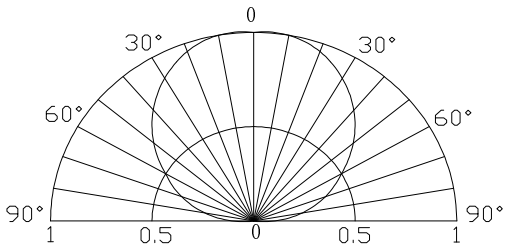
- Photo-catalyst
- Money Detector
- UV-Curing
- Other Lighting

▪Absolute Maximum Rating (Ta=25℃)

Item	Symbol	Value	Unit
DC Forward Current	I_F	500	mA
Pulse Forward Current*	I_{FP}	700	mA
Reverse Voltage	V_R	15	V
Power Dissipation	P_D	6,000	mW
Operating Temperature	Topr	-30 ~ +85	℃
Storage Temperature	Tstg	-40 ~ +100	℃
Lead Soldering Temperature	Tsol	260℃/5sec	-

*Pulse width Max.10ms Duty ratio max 1/10

▪Directivity



▪Electrical -Optical Characteristics (Ta=25℃)

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
DC Forward Voltage	V_F	I_F=400mA	10.2	11.1	12	V
DC Reverse Current	I_R	V_R=25V	-	-	10	μA
Radiant flux*	Φe	I_F=400mA	700	800	-	mW
Peak Wavelength*	λ_p	I_F=400mA	400	405	410	nm
50% Power Angle	$2\theta_{1/2}$	I_F=400mA	-	120	-	deg

Note: *1. Tolerance of Radiant Flux is ±15%

*2. Tolerance of Peak Wavelength is ±1nm

*3 Don't drive at rated current more than 5s without heat sink for High Power emitter series.