

AlGaInP Ultra Bright Yellow LED Lamp

OPE5T59UY

The **OPE5T59UY** is AlGaInP ultra bright light emitting diode that is designed for ultra brightness and excellent reliability. This device is optimized for efficiency at peak wavelength 591nm.

This device is packaged T13/4 plastic package and has narrow beam angle with lensed package and cup frame.

FEATURES

- Ultra brightness
- Peak wavelength : 591nm
- Narrow beam angle
- Excellent reliability
- Available for pulse operating

APPLICATIONS

- PIXEL cluster
- LED Dot Matrix
- Traffic signal
- Display signboard

STORAGE

- Condition : 5°C~35°C,R.H.60%
- Terms : within 3 months from production date
- Remark : Once the package is opened, the products should be used within a day.
Otherwise, it should be keeping in a damp proof box with desiccants.

* Please take proper steps in order to secure reliability and safety in required conditions and environments for this device.

MAXIMUM RATINGS

(Ta=25°C)

Item	Symbol	Rating	Unit
Power dissipation	P _D	40	mW
Forward current	I _F	30	mA
Pulse forward current	I _{FP}	50	mA
Reverse voltage	V _R	4	V
Operating temp.	T _{opr.}	-25~+85	°C
Soldering temp.	T _{sol.}	260.	°C

*1.Duty ratio = 1/100, pulse width=0.1ms.

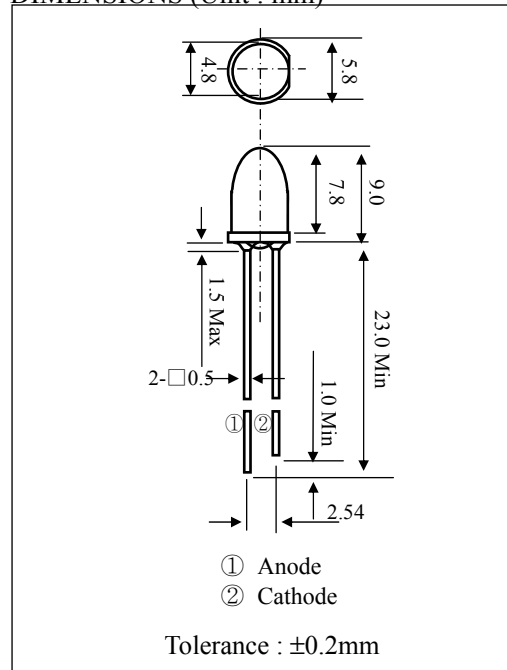
*2.Lead soldering temperature (2mm from case for 5sec.).

ELECTRO-OPTICAL CHARACTERISTICS

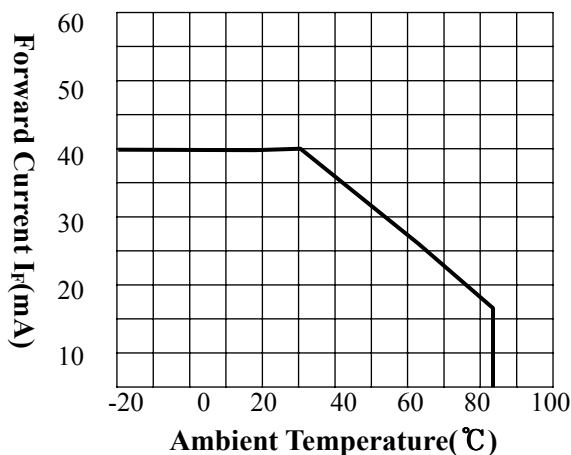
(Ta=25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Luminous intensity	I _v	I _F =20mA		5000		mcd
Peak emission wavelength	λ _p	I _F =20mA		591		nm
Spectral bandwidth	Δλ	I _F =20mA		15		nm
Forward voltage	V _F	I _F =20mA		2.0	2.4	V
Reverse current	I _R	V _R =4V			100	μA
Half angle	Δθ	I _F =20mA		±8		deg.

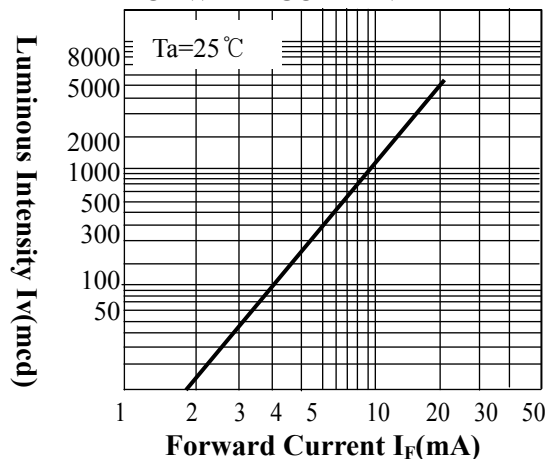
DIMENSIONS (Unit : mm)



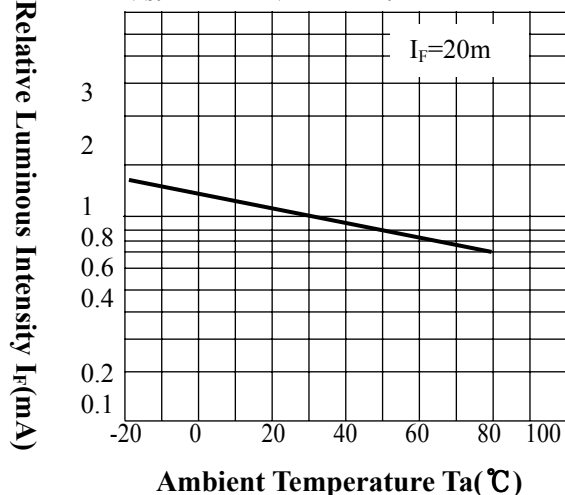
● **FORWARD CURRENT Vs. AMBIENT TEMP**



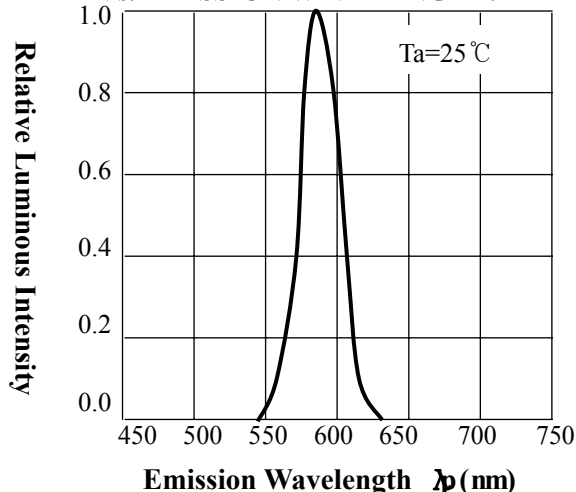
● **LUMINOUS INTENSITY Vs. FORWARD CURRENT**



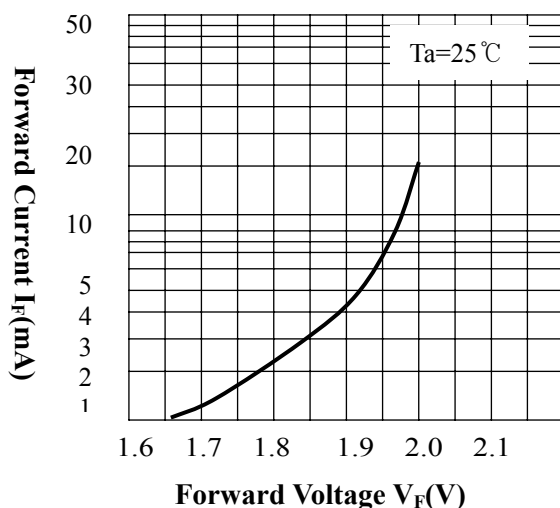
● **RELATIVE LUMINOUS INTENSITY Vs. AMBIENT TEMP.**



● **RELATIVE LUMINOUS INTENSITY Vs. EMISSION WAVELENGTH.**



● **FORWARD CURRENT Vs. FORWARD VOLTAGE**



● **RELATIVE LUMINOUS INTENSITY Vs. ANGULAR DIAPLACEMENT**

