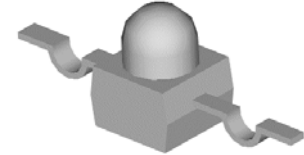


## Subminiature 850nm Infrared LED

### UL J428

#### Description

The UL J428 is used high efficiency 850nm GaAIAs materials, molded into 'Yoke' Lead SMT package with clear lens. Comparing conventional GaAs/GaAs technology under similar wavelength, GaAIAs offers much higher radiant power. The viewing angle being offered is 25 degree. The most suitable application is Infrared radiation source for CMOS camera



#### Applications

- Opto-Electronic Switch
- Infrared radiation source for CMOS camera
- Infrared data transmission



pb-free

#### Electronic Optical Characteristics (@ 20mA):

Part Number	$\lambda$ (nm)		Lens Color	mW/sr		View Angle (2 $\theta$ 1/2)	VF(V)	
	$\lambda_p$	$\Delta \lambda$		Min.	Typ.		Typ.	Max.
UL J428	850	45	Water Clear	4.0	9.0	25	1.5	1.7

\* Radiant Intensity Typ. 40 mW/sr @  $I_F=100mA$ ,  $t_p=100\mu$  sec,  $t_p/T=0.01$ ,  $V_F @ 2.40$  Max.

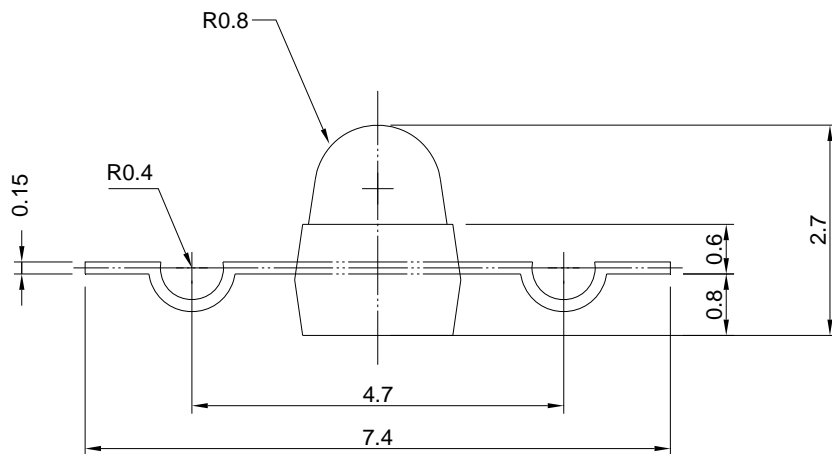
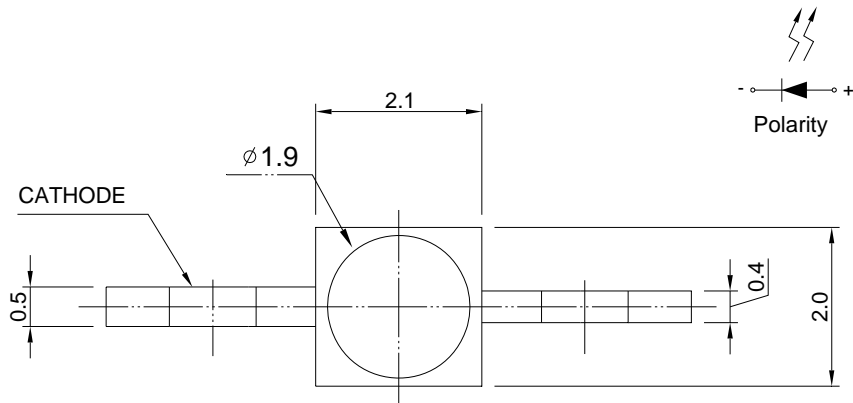
#### Absolute Maximum Ratings (@ $T_a=25^\circ C$ )

Parameter	Symbol	Rating	Unit	Condition
Continuous Forward Current	$I_F$	100	mA	---
Peak Forward Current	$I_P$	1.0	A	Pulse Width=100us Duty Cycle = 1%
Soldering Temperature	$T_{sol}$	260	$^\circ C$	3 Sec
Storage Temperature	$T_{stg}$	-40 - +85	$^\circ C$	---
Operating Temperature	$T_{opr}$	-25 - +85	$^\circ C$	---
Power Dissipation	PD	200	mW	25 $^\circ C$ Free Air Temperature

Note: Please take note the Absolute Maximum Rating values. Any operation beyond the specified ratings in this table will result degradation of LED life- span and may cause LED to fail.

**Package Dimension:**

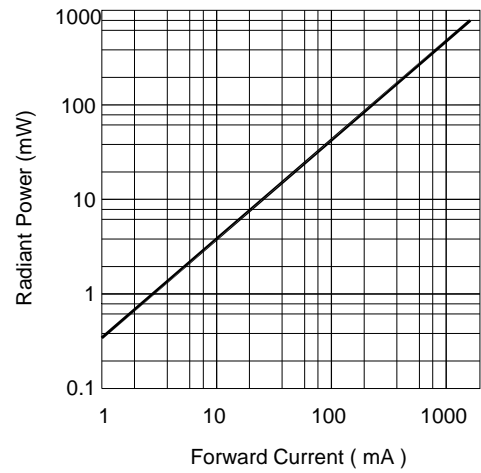
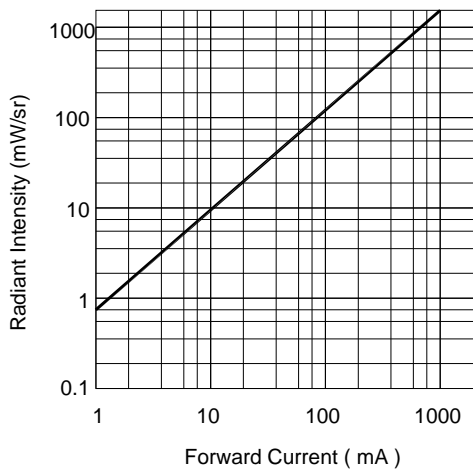
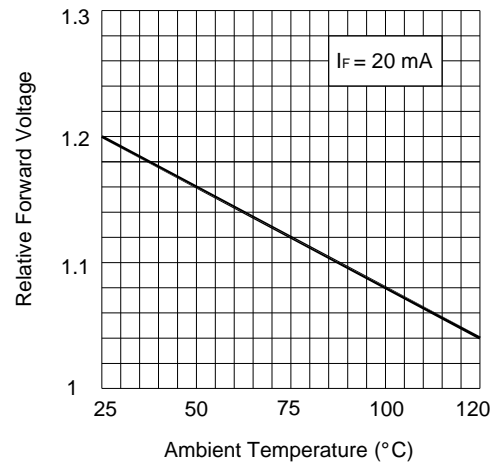
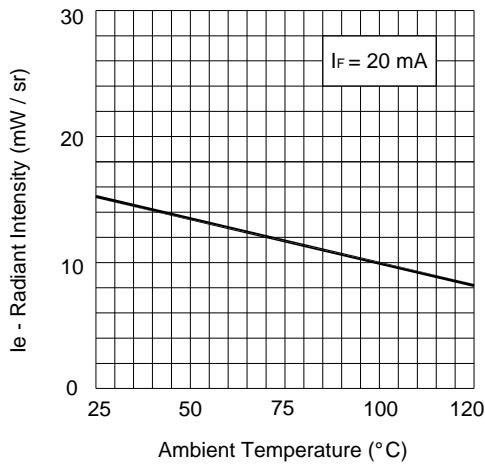
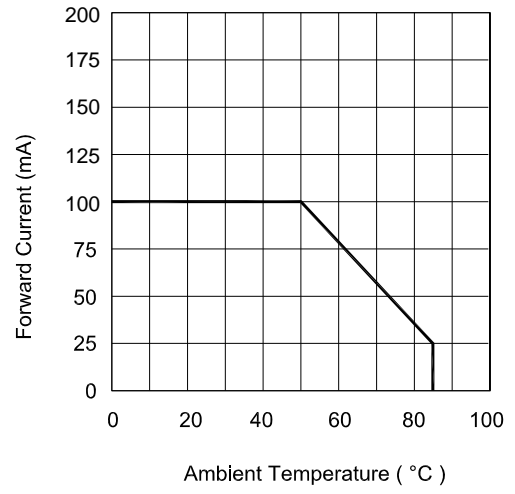
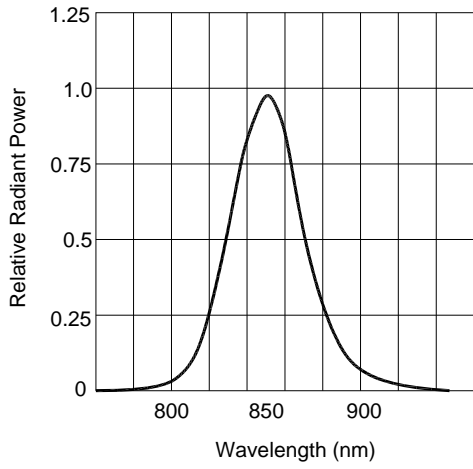
unit : mm



**Notes:**

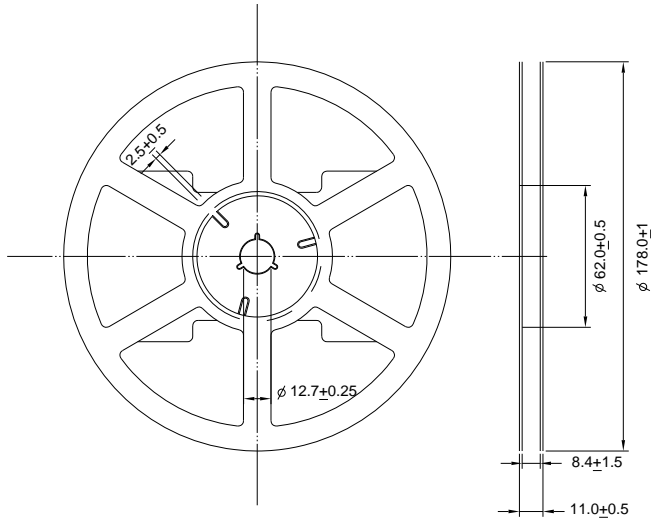
1. All dimensions are millimeters.
2. Tolerance is  $\pm 0.2$ mm unless otherwise specified.
3. Specifications are subject to change without notice.

### Optical Characteristics Curves



### Reel Dimension:

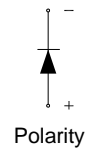
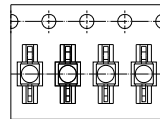
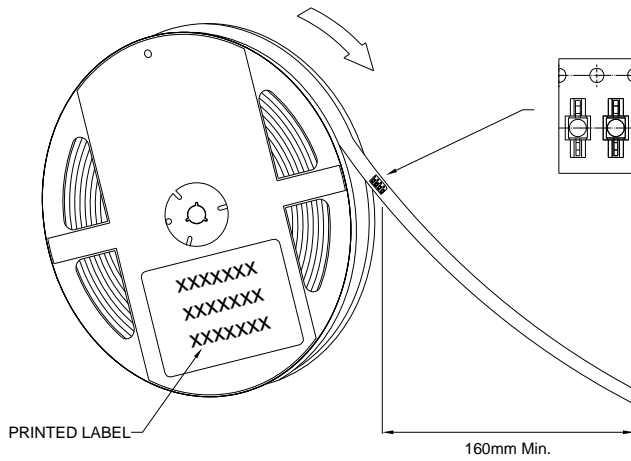
unit : mm



Note:

Available in 8mm carrier tape on 178mm diameter reels. (1000 pieces)

USER FEED DIRECTION

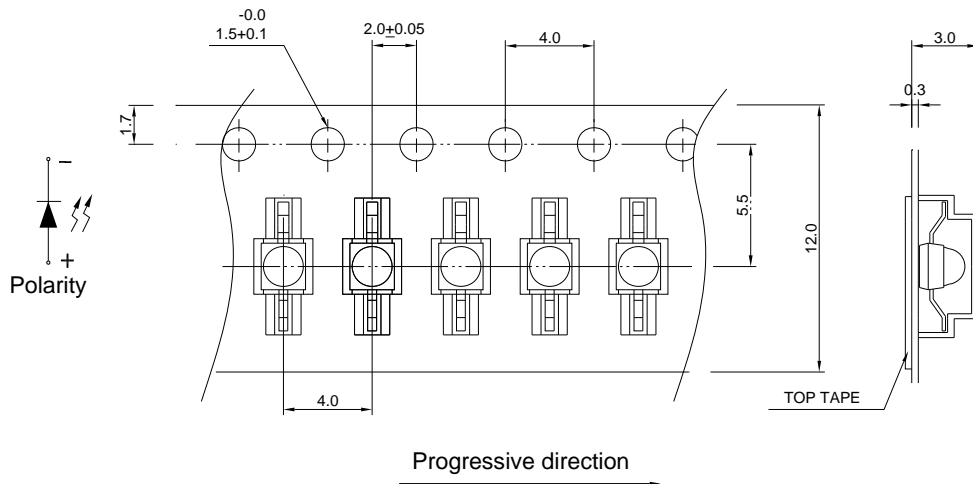


Note:

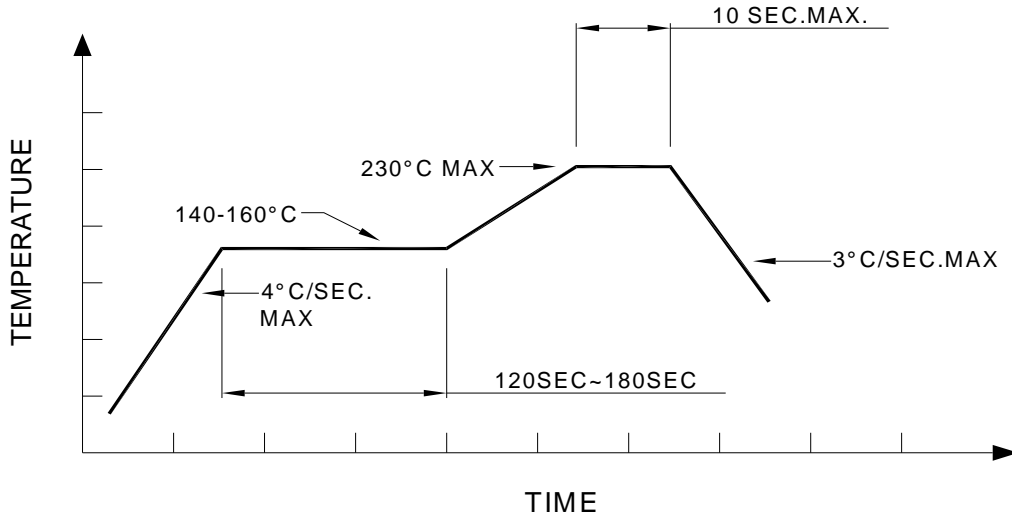
A spacing of approximately 160mm between the front edge of tape

### Tape Dimension:

unit:mm



**Recommended re-flow soldering profile:**



**Recommended Pb-free re-flow soldering profile:**

