

Subminiature 850nm Infrared LED

UL H428

Description

The UL H428 is used high efficiency 850nm GaAIAs materials, molded into 'Gull Wing' 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 viewing angles. The most suitable application is Infrared radiation source for CMOS camera



Applications

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



Electronic Optical Characteristics (at 20mA):

Part Number	λ (nm)		Lens Color	mW/sr		View Angle (2 θ 1/2)	VF(V)	
	λ_p	$\Delta \lambda$		Min.	Typ.		Typ.	Max.
UL H428	850	45	Water Clear	4.0	9.0	25	1.5	1.7

* Radiant Intensity Typ. 40 mW/sr @ IF=100mA, tp=100u sec, tp/T=0.01, VF @ 2.40 Max.

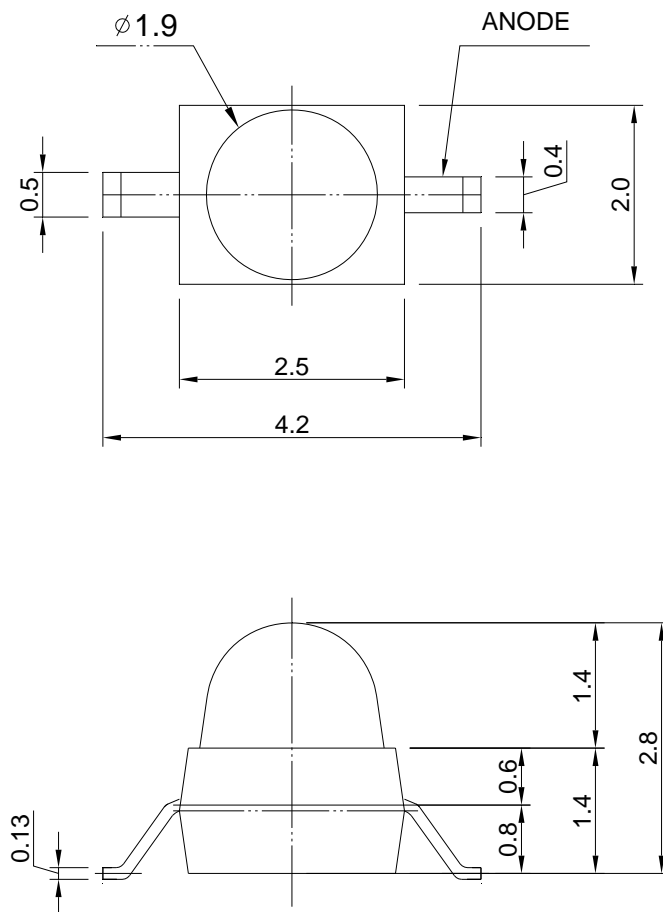
Absolute Maximum Ratings (@ Ta=25°C)

Parameter	Symbol	Rating	Unit	Condition
Continuous Forward Current	IF	100	mA	---
Peak Forward Current	IP	1.0	A	Pulse Width=100us Duty Cycle = 1%
Soldering Temperature	Tsol	260	°C	3 Sec
Storage Temperature	Tstg	-40 - +85	°C	---
Operating Temperature	Topr	-25 - +85	°C	---
Power Dissipation	PD	200	mW	25°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.

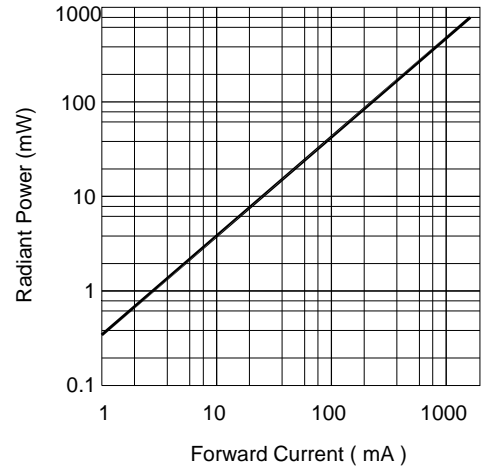
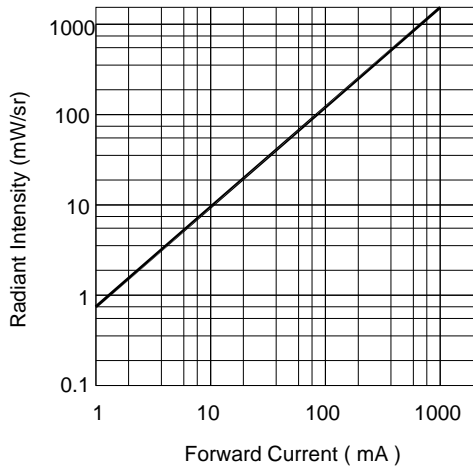
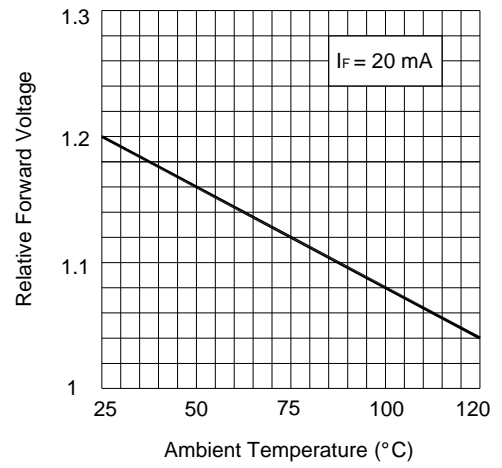
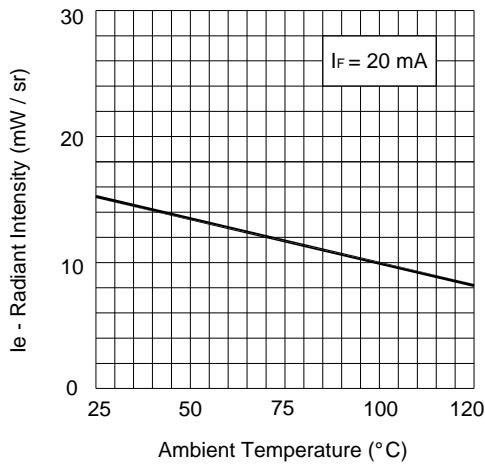
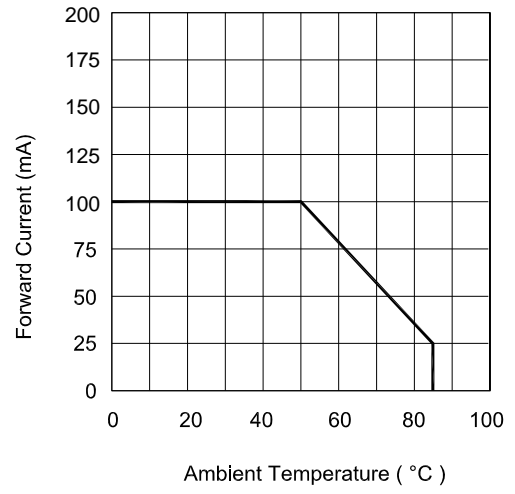
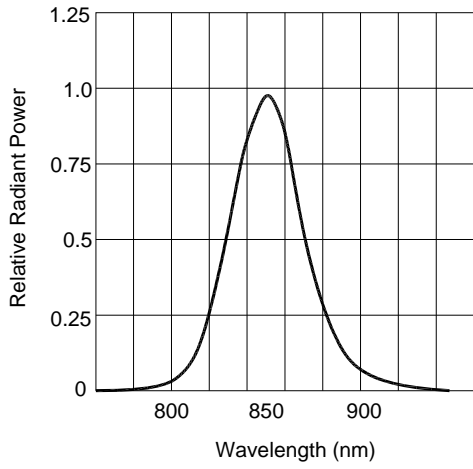
Package Dimension:

unit : mm

**Notes:**

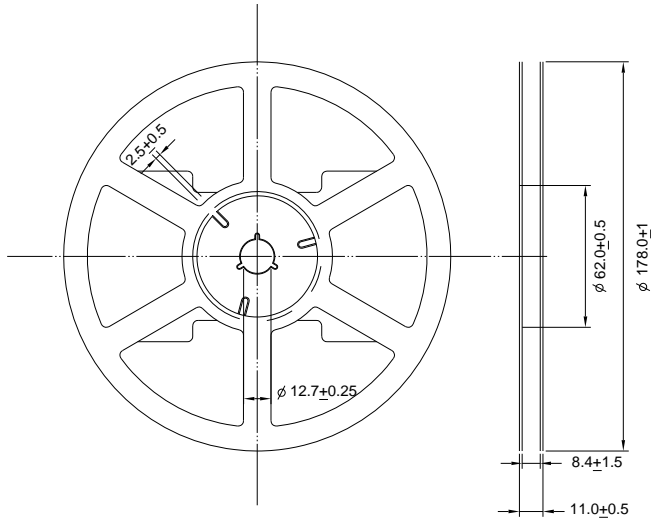
1. All dimensions are millimeters.
2. Tolerance is ± 0.2 mm unless otherwise specified.
3. Specifications are subject to change without notice.

Optical Characteristics Curves



Reel Dimension:

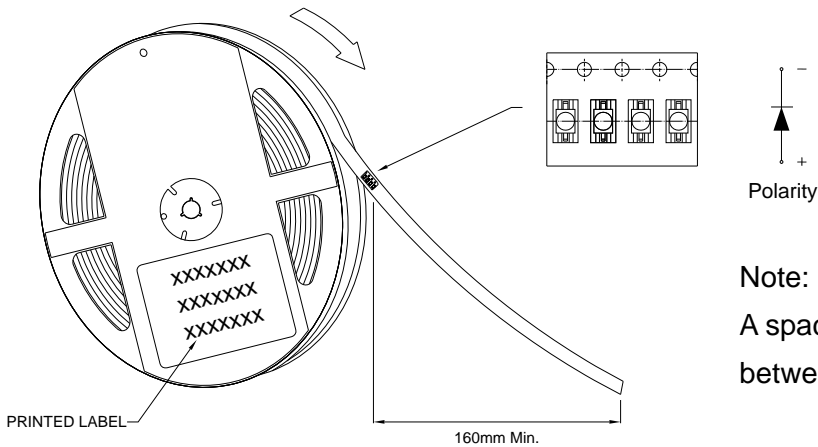
unit : mm



Note:

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

USER FEED DIRECTION

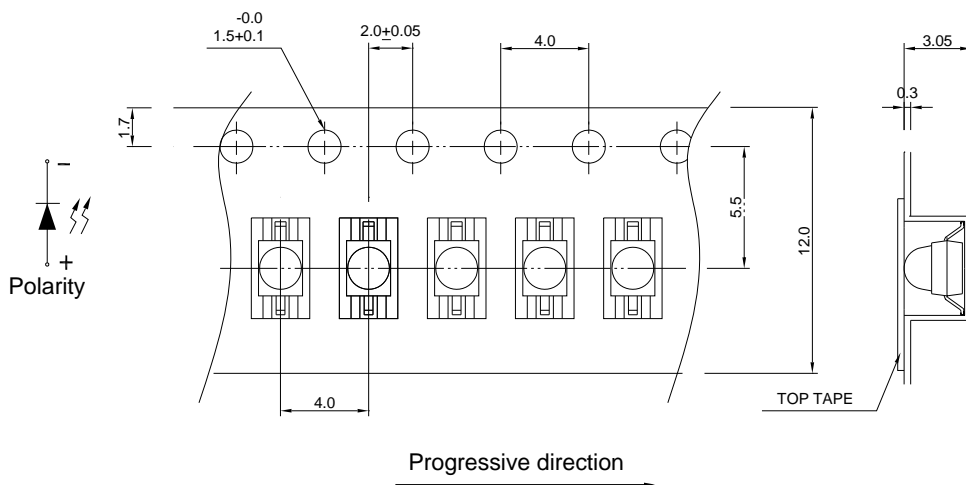


Note:

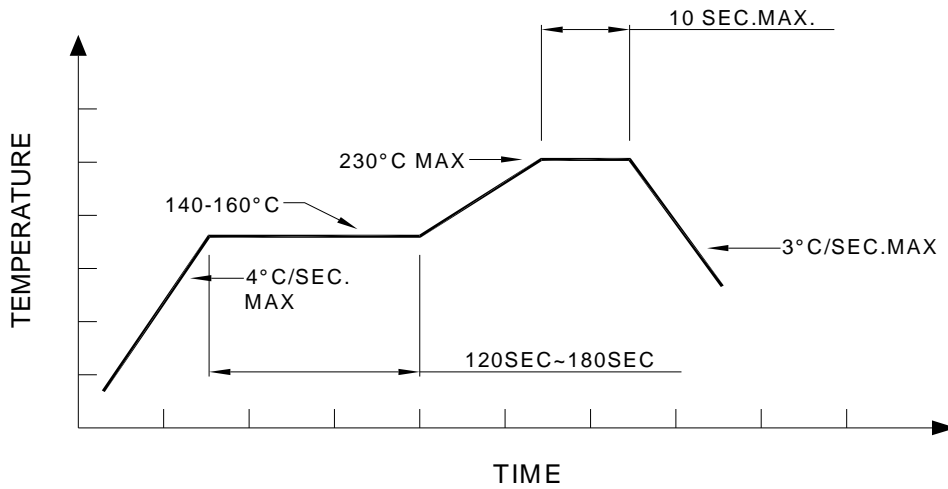
A spacing of approximately 160mm between the front edge of tape

Tape Dimension:

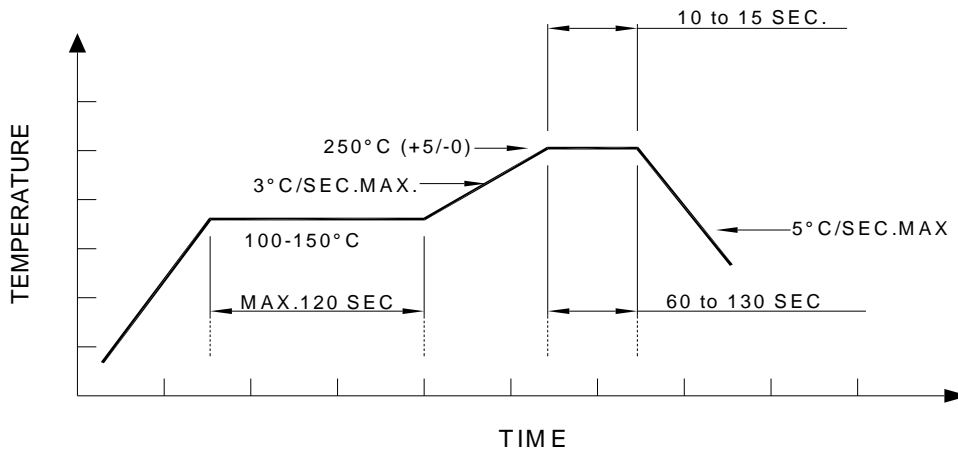
unit:mm



Recommended re-flow soldering profile:



Recommended Pb-free re-flow soldering profile:



Note:

All the specifications listed in this data sheet are suitable for general electronic equipment, office equipment and communication devices. Kindly consult Sales Representatives for specific reliabilities request, Forward Voltage, Luminous Intensity, Wavelength, Radiant Power or Viewing Angle.