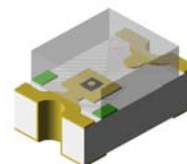


0805 Package 850nm Infrared LED

US 44C8

Description

The US 44C8 is used high efficiency 850nm GaAlAs materials, molded into 0805 package with clear lens. The new GaAlAs technology has come with high radiant power at wavelength of 850nm. The viewing angle being offered is 120 degree.



Applications

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

RoHS



Electronic Optical Characteristics (@ 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.
US 44C8	850	45	Water Clear	0.5	1.2	120	1.5	1.7

* Radiant Intensity Typ. 4.0 mW/sr @ IF=100mA, tp=100u sec, tp/T=0.01, VF @ 2.40 Max.

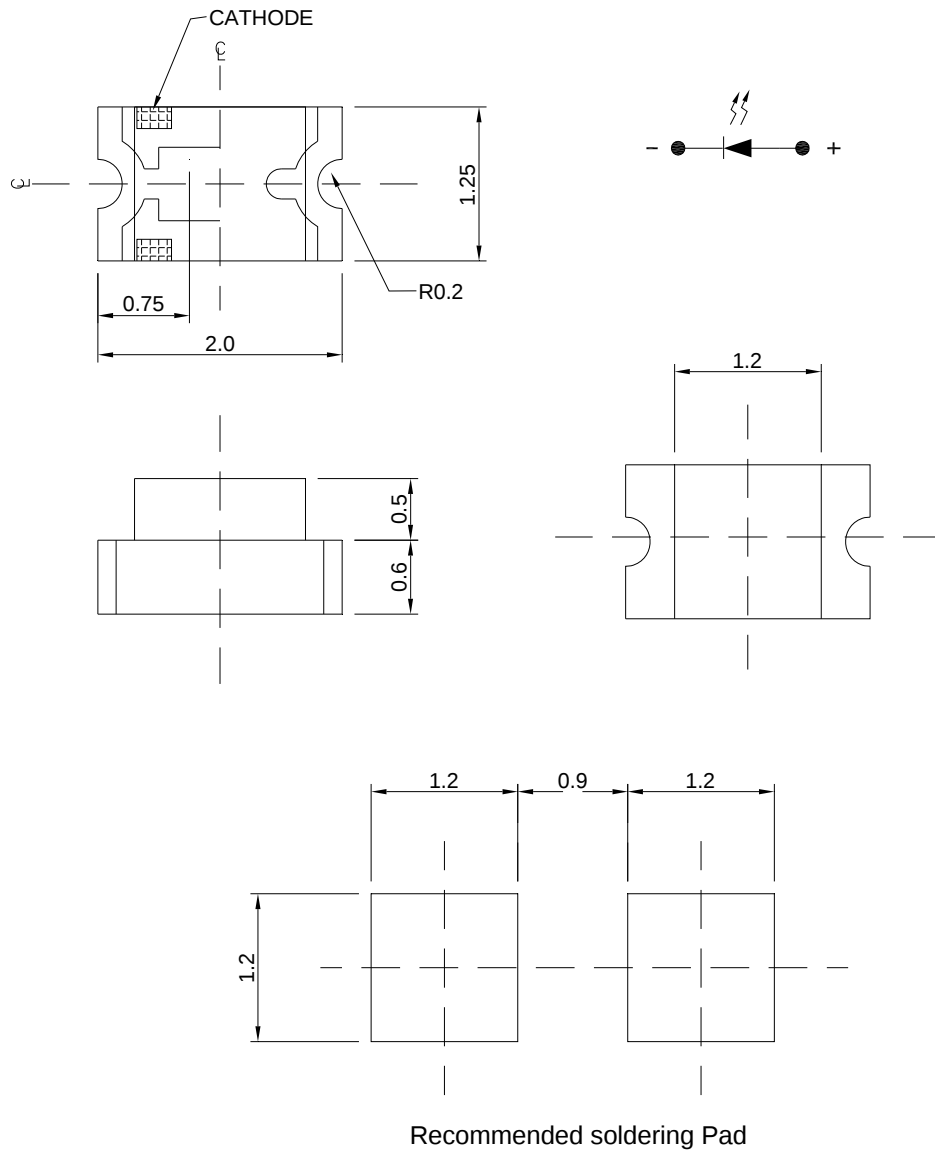
Absolute Maximum Ratings (@ Ta=25°C)

Parameter	Symbol	Rating	Unit	Condition
Continuous Forward Current	IF	60	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:

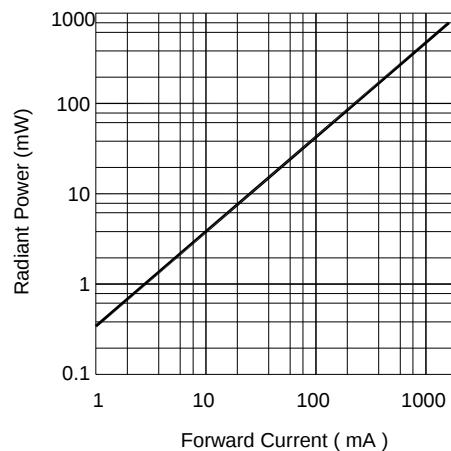
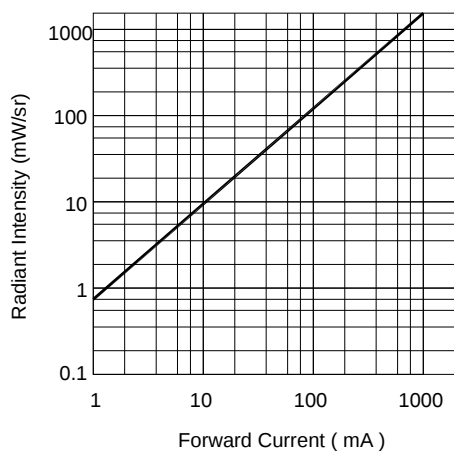
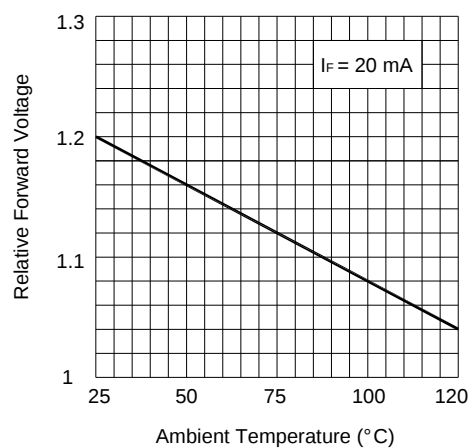
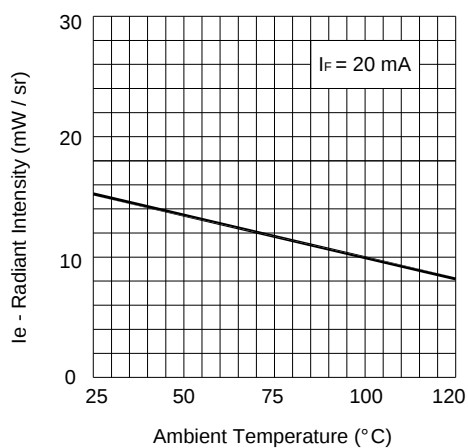
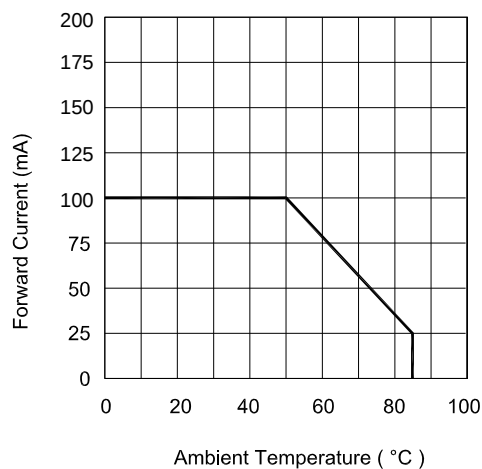
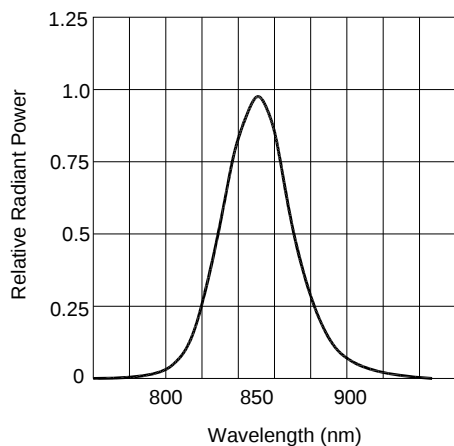
unit : mm



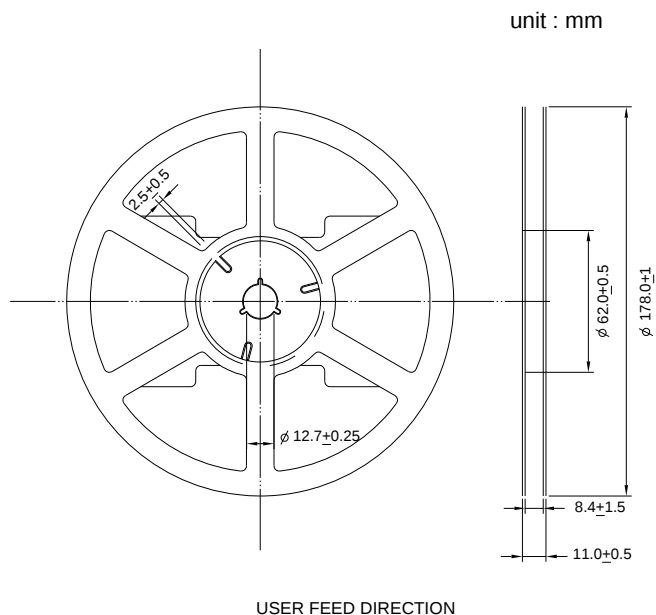
Notes:

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

Optical Characteristics Curves

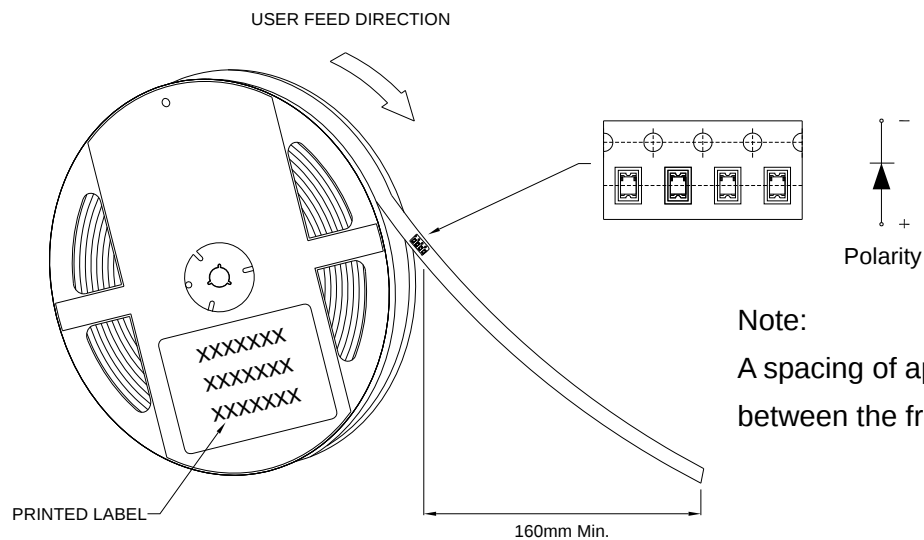


Reel Dimension:



Note:

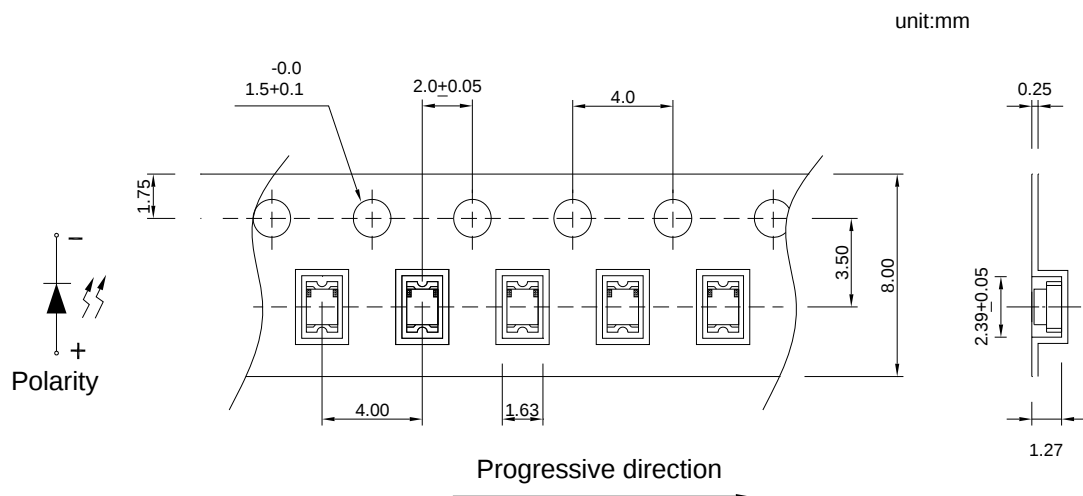
Available in 8mm carrier tape on 178mm diameter reels. (3000 pieces)



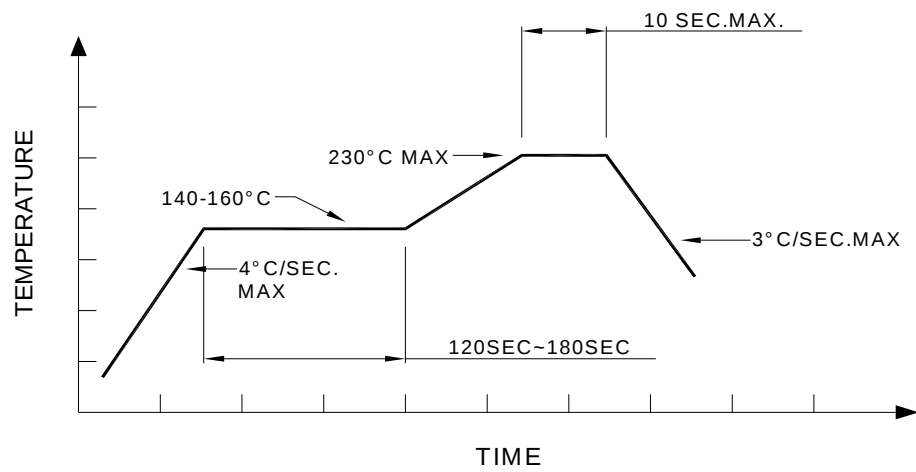
Note:

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

Tape Dimension:



Recommended re-flow soldering profile:



Recommended Pb-free re-flow soldering profile:

