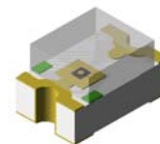


0805 Package 875nm Infrared LED

US 45C8

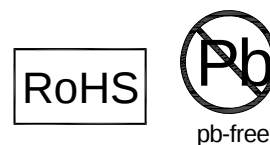
Description

The US 45C8 is used high efficiency 875nm GaAlAs materials, molded into 0805 package with clear lens. Comparing conventional GaAs/GaAs technology under similar wavelength, GaAlAs offers much higher radiant power. The viewing angle being offered is 140 degree.



Applications

- Opto-Electronic switch
- Infrared remote control unit
- Free air transmission system
- Infrared applied system



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.
US 45C8	875	80	Water Clear	0.5	0.8	140	1.2	1.6

* Radiant Intensity Typ. 4.0 mW/sr @ IF=100mA, tp=100u sec, tp/T=0.01, VF @ 1.80 Max.

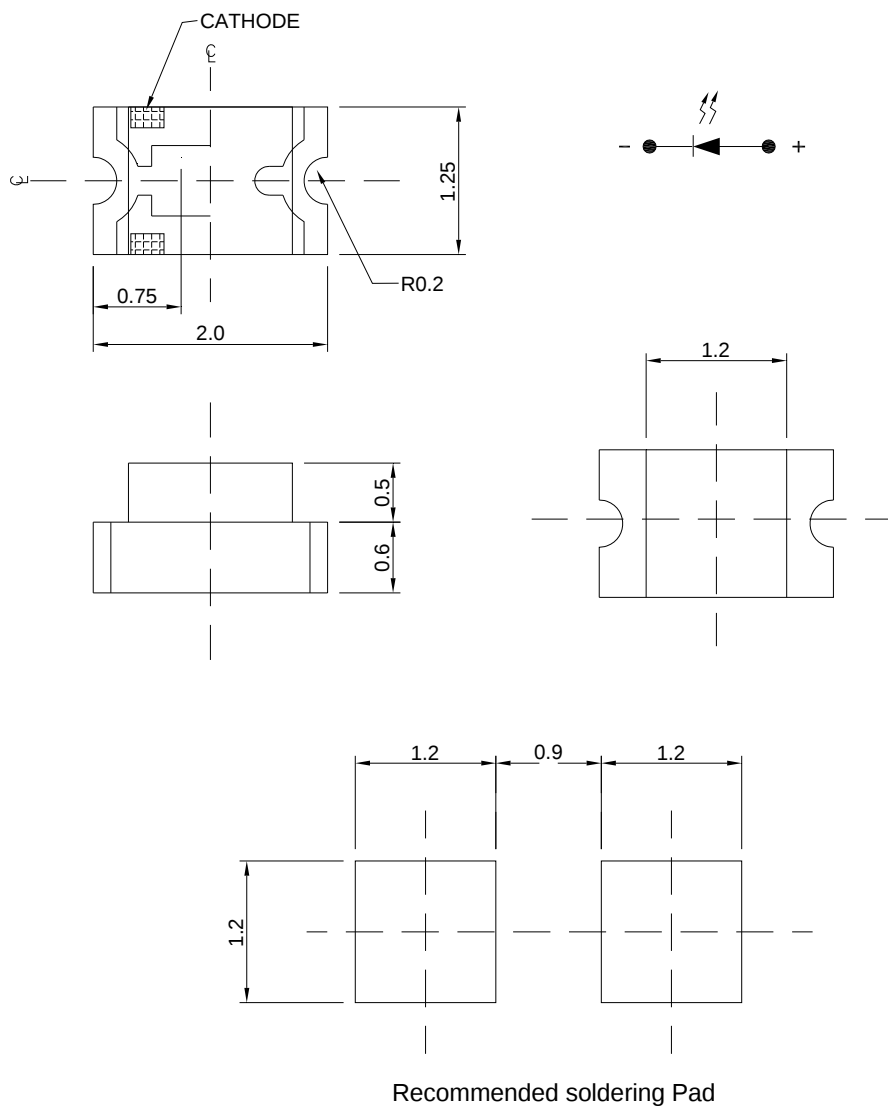
Absolute Maximum Ratings (at Ta=25°C)

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	150	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:

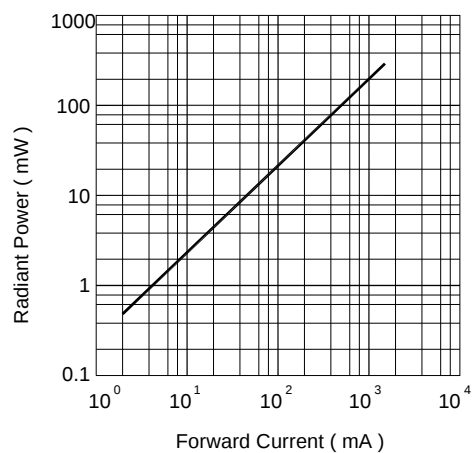
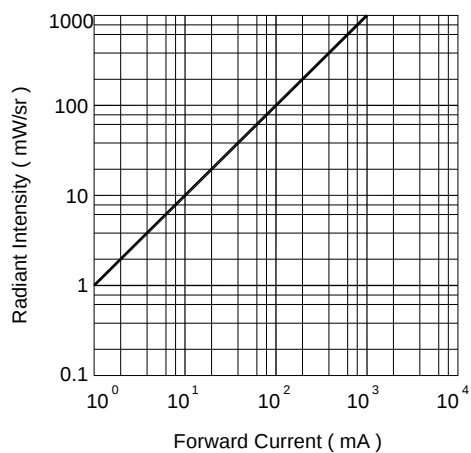
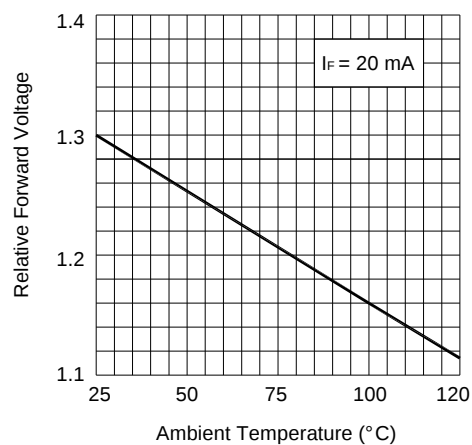
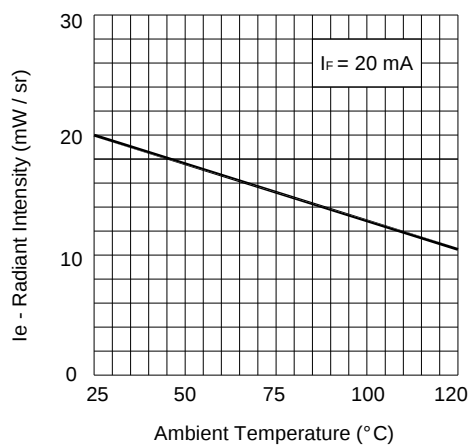
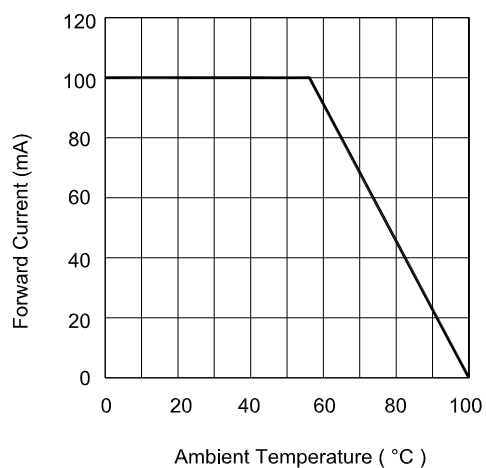
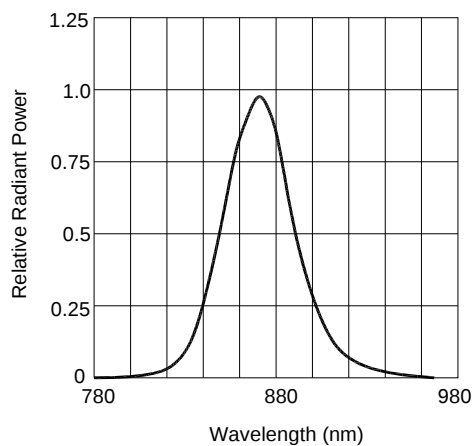
unit : mm



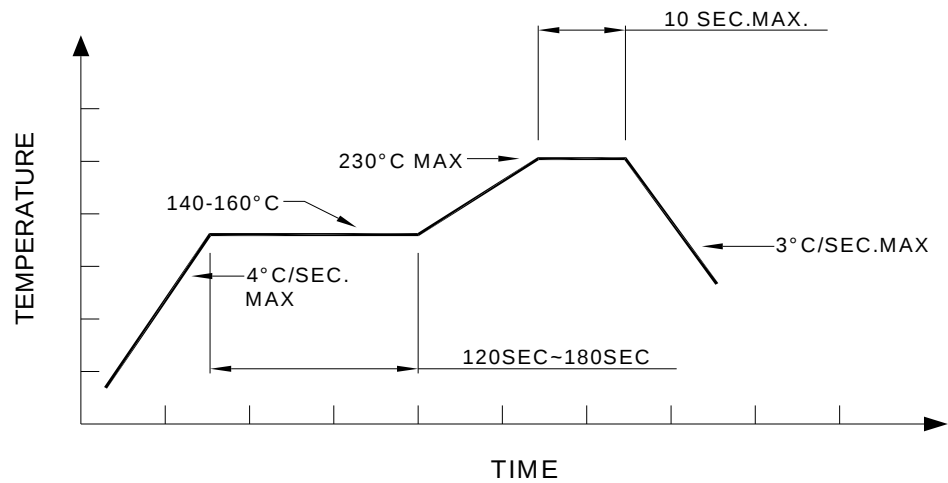
Notes:

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



Recommended re-flow soldering profile:



Recommended Pb-free re-flow soldering profile:

