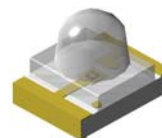


Dome Package 850nm Infrared LED

US 9448

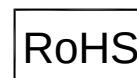
Description

The US 9448 is used high efficiency 850nm GaAlAs materials, molded into 3.2x2.4x1.6 mm package with clear lens. The new GaAlAs technology has come with high radiant power at wavelength of 850nm. The viewing angle being offered is 20 degree.



Applications

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



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 9448	850	45	Water Clear	2.0	6.0	20	1.5	1.7

* Radiant Intensity Typ. 18 mW/sr @ IF=100mA, tp=100u sec, tp/T=0.01, VF @ 2.40 Max.

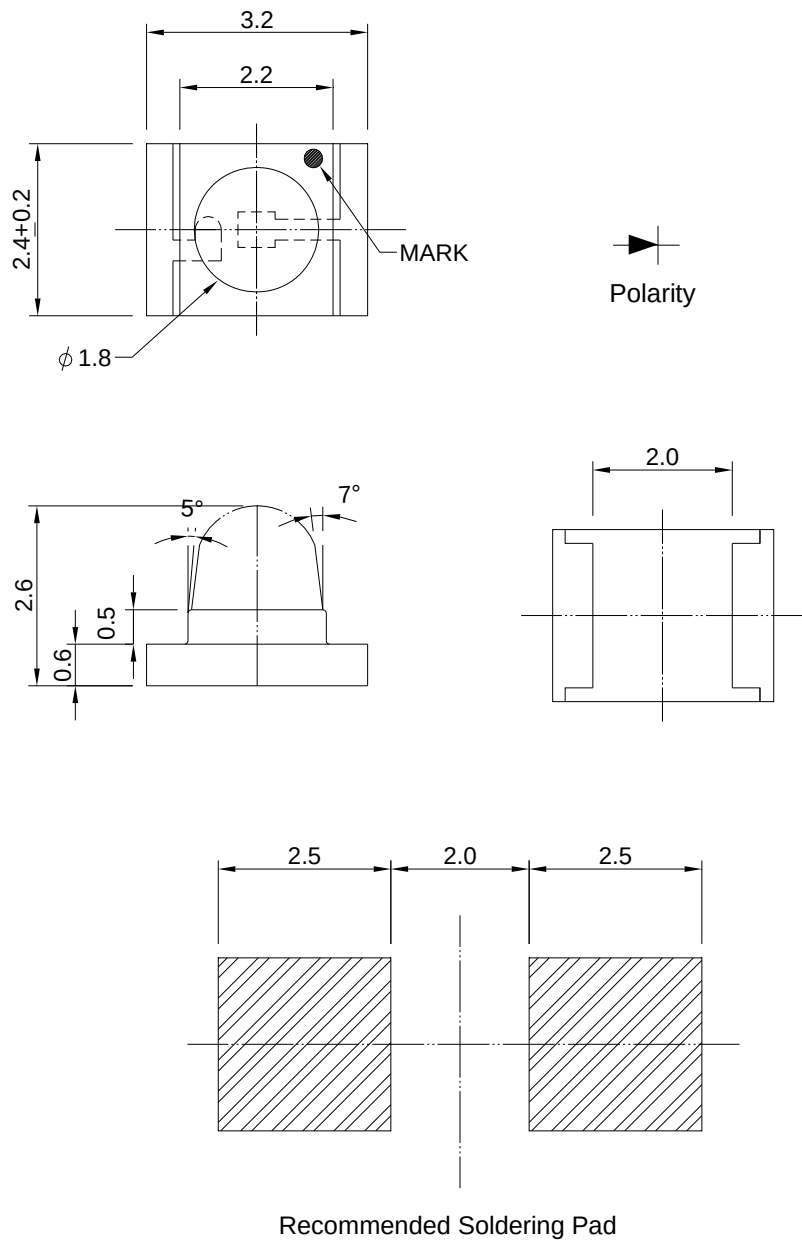
Absolute Maximum Ratings (at Ta=25°C)

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	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:

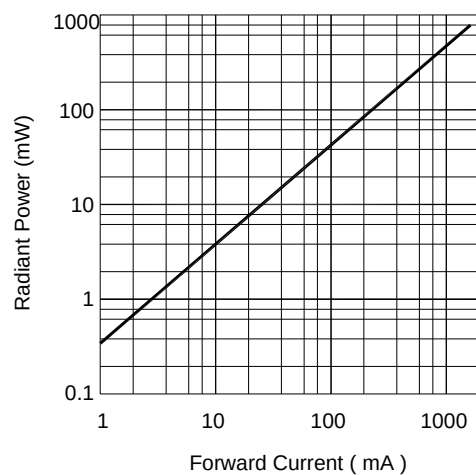
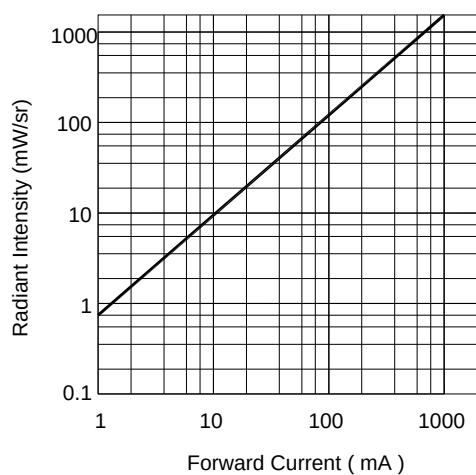
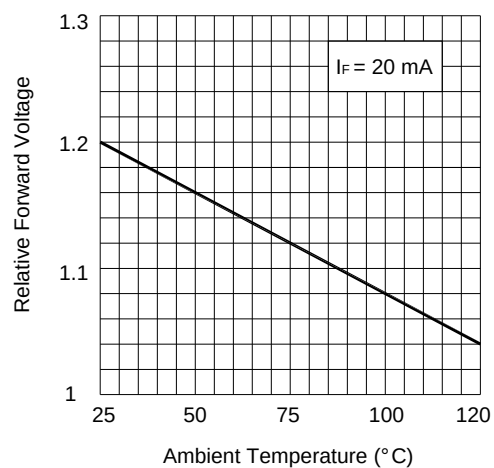
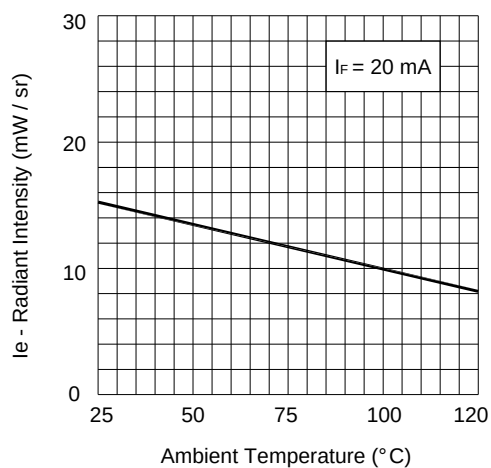
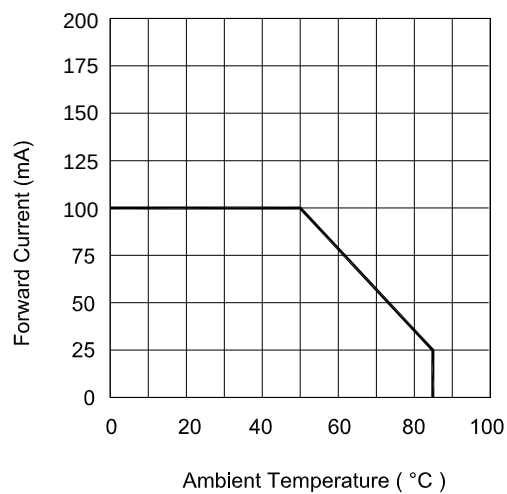
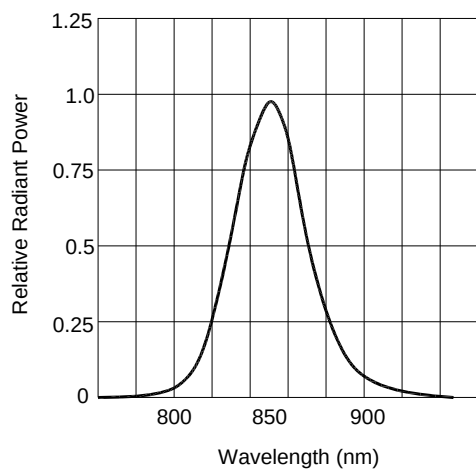
unit:mm



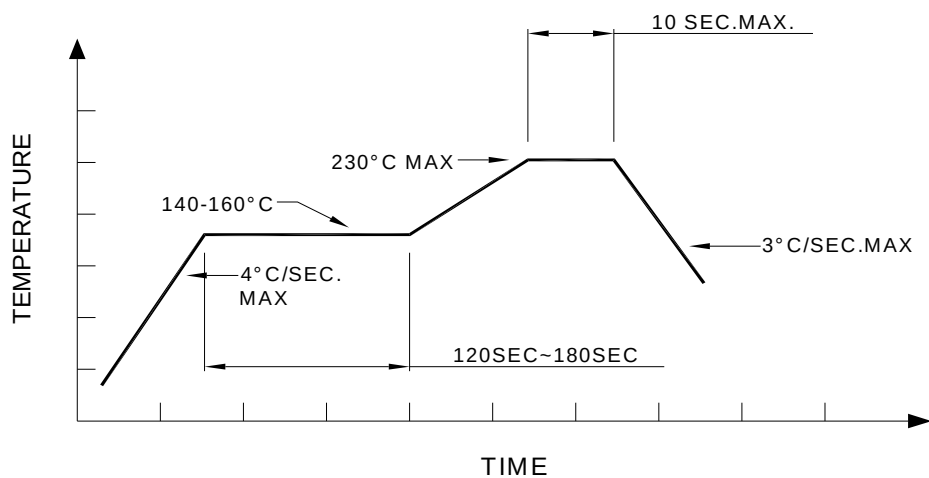
Notes:

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

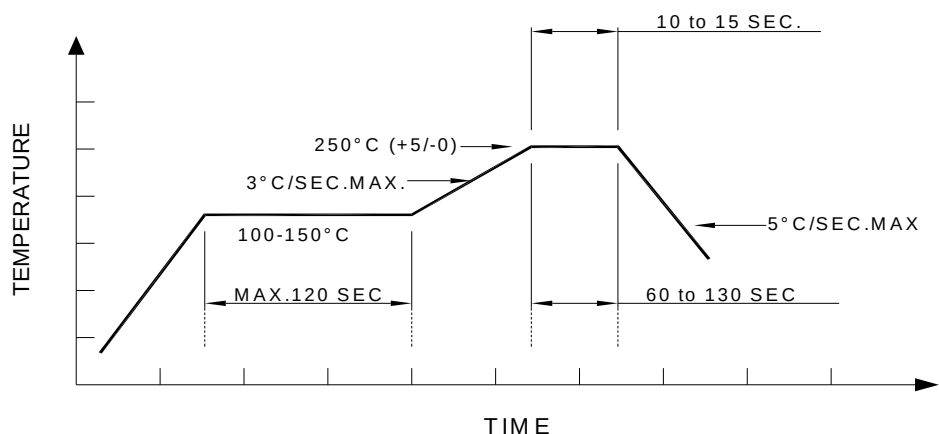
Optical Characteristics Curves



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.