ZIR-1608C-08-Z3

0.8mm Height Flat Top Infrared LED

Descriptions

ZIR-1608C-08-Z3 is an infrared emitting diode in miniature SMD package which is molded in a water clear plastic with flat top view lens.
The device is spectrally matched with silicon photodiode and phototransistor.

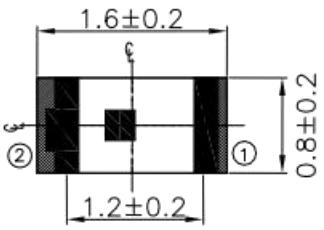
Features

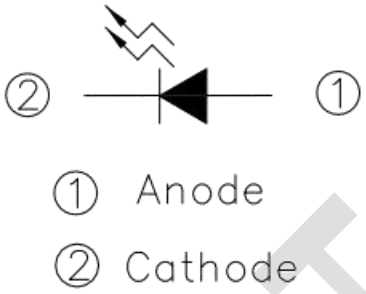
- Small double-end package
- Low forward voltage
- Good spectral matching to Si photo detector
- Package in 8mm tape on 7” diameter reel
- Pb free
- The product itself will remain within RoHS compliant version.
- Compliance with EU REACH

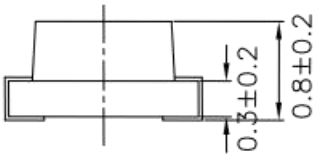
Applications

- PCB mounted infrared sensor
- Infrared emitting for miniature light barrier
- Floppy disk drive
- Optoelectronic switch
- Smoke detector

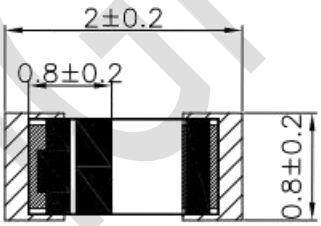
Package Dimensions

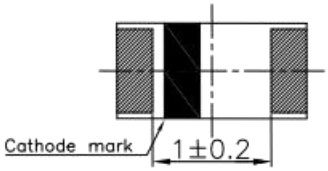






For refiow soldering (Propose)





Notes: 1.All dimensions are in millimeters
2.Tolerances unless dimensions ±0.1mm
3.Suggested pad dimension is just for reference only
Please modify the pad dimension based on individual need

Rank

Parameter	Symbol	Condition	Min.	Max.	Unit
F	Ee	I_F=20mA	0.5	1.5	mW/sr
G	Ee	I_F=20mA	1.0	2.5	mW/sr

Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Rating	Units
Continuous Forward Current	I_F	65	mA
Reverse Voltage	V_R	5	V
Operating Temperature	T_{opr}	-25 ~ +85	℃
Storage Temperature	T_{stg}	-40 ~ +85	℃
Soldering Temperature *1	T_{sol}	260	℃
Power Dissipation at(or below) 25℃Free Air Temperature	P_d	130	mW

Notes: *1 Soldering time≦5 seconds.

Electro-Optical Characteristics (Ta=25℃)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Radiant Intensity	Ie	I_F=20mA	0.2	0.7		mW/sr
Peak Wavelength	λp	I_F=20mA	--	940	--	nm
Spectral Bandwidth	Δλ	I_F=20mA	--	50	--	nm
Forward Voltage	V_F	I_F=20mA	--	1.2	1.5	V
Reverse Current	I_R	V_R=5V	--	--	10	μA
View Angle	2θ1/2	I_F=20mA	--	150	--	deg

Typical Electro-Optical Characteristics Curves

Fig.1 Forward Current vs. Ambient Temperature

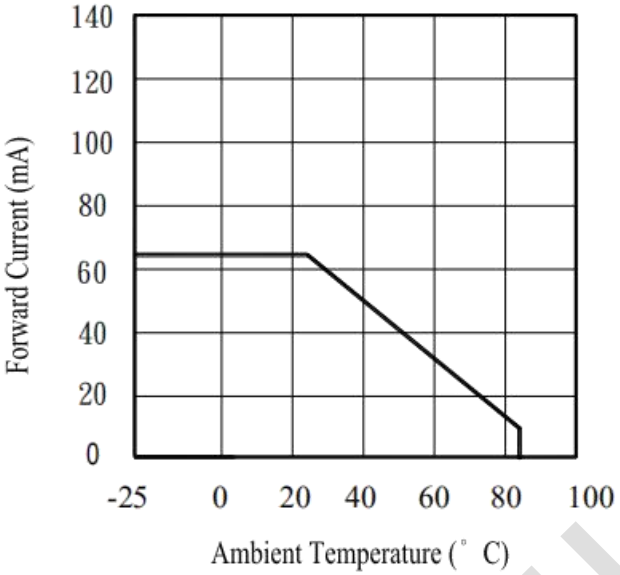


Fig.2 Spectral Distribution

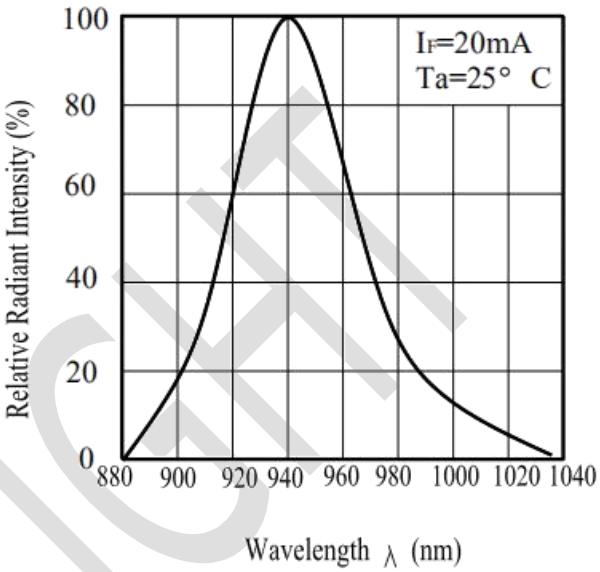


Fig.3 Forward Current vs . Forward Voltage

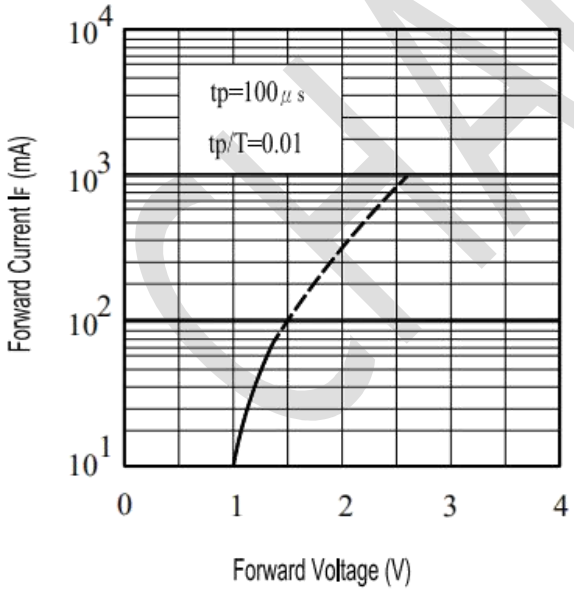
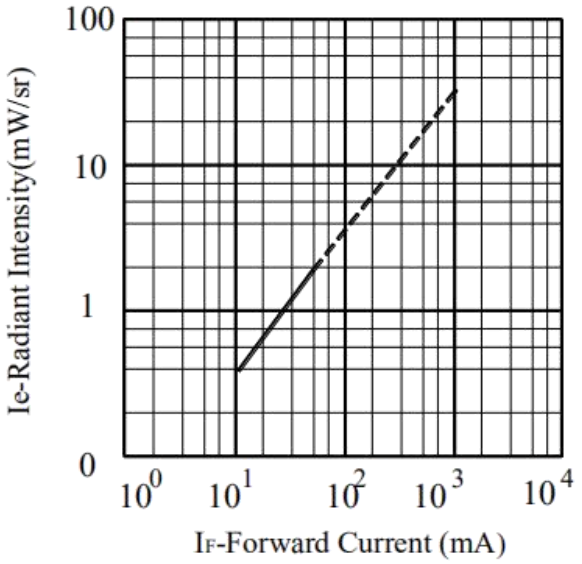
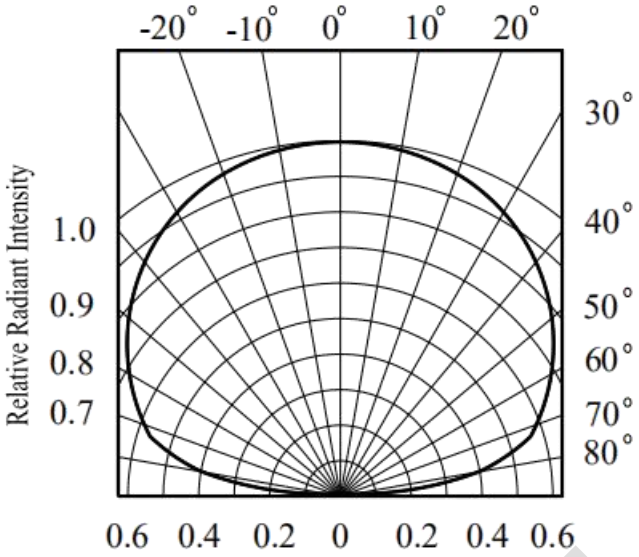


Fig.4 Relative Intensity vs. Forward Current

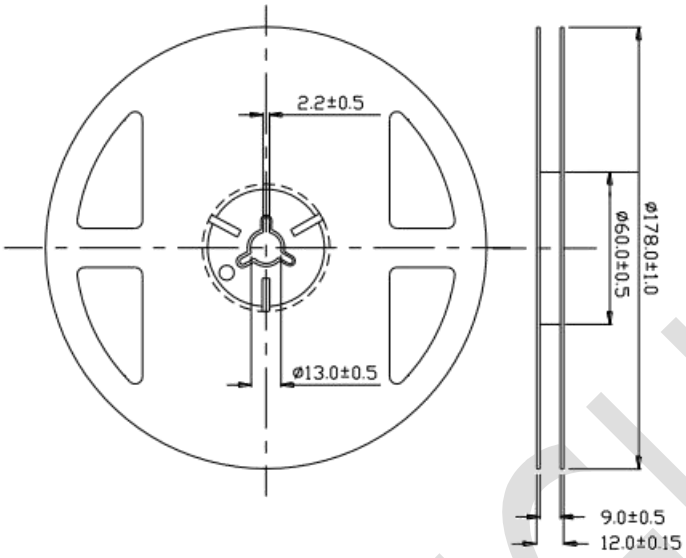


Typical Electro-Optical Characteristics Curves

Fig.5 Relative Radiant Intensity vs. Angular Displacement

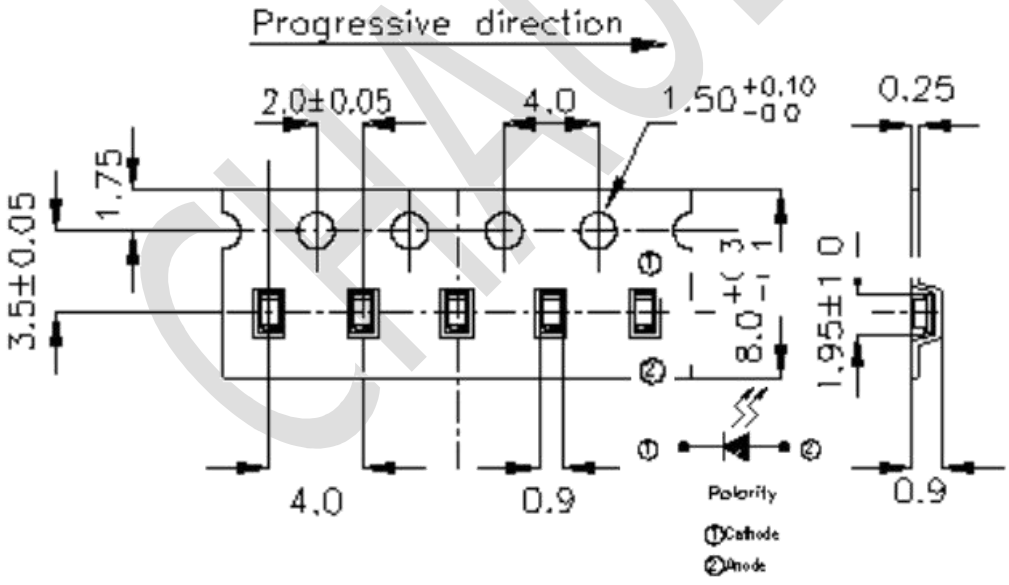


Package Dimensions



Note: The tolerances unless mentioned are ±0.1mm, Unit: mm

Carrier Taping Dimensions: (Quantity: 3000PCS/Reel)



Note: The tolerances unless mentioned are ±0.1mm, Unit: mm