

Datasheet

Item no. 1567235

V1_0917_01_en

IR diode

Features

- ◆ High radiant intensity
- ◆ Peak wavelength= $\lambda_p=940\text{nm}$
- ◆ View angle 30°
- ◆ High reliability
- ◆ 2.54mm Lead spacing
- ◆ Low forward voltage
- ◆ Pb free
- ◆ The product itself will remain within RoHS compliant version.

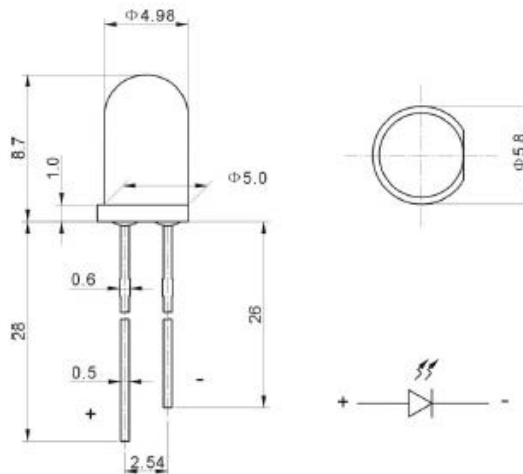
Descriptions

- ◆ Infrared Emitting Diode (OS-5038F) is a high intensity diode , molded in a water clear plastic package.
- ◆ The device is spectrally matched with phototransistor , photodiode and infrared receiver module.

Applications

- ◆ Free air transmission system ◆ Optoelectronic switch ◆ Floppy disk drive
- ◆ Infrared applied system ◆ Smoke detector

Package Dimension:



NOTE:TOLERANCE $\pm 0.5\text{mm}$

Part NO.	Material	Lens Color
OS-5038F	AlGaAs	Water Clear

Notes:

1. All dimensions are in millimeters.
2. Tolerances unless dimensions $\pm 0.25\text{mm}$.

Unit: mm

Datasheet

Item no. 1567235

V1_0917_01_en

IR diode

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Unit
Continuous Forward Current	I_F	100	mA
Power Dissipation at (or below) 25°C Free Air Temperature	P_d	150	mW
Transient Peak Current (Pulse width=100 μ s, Duty cycle=1%)	I_{FP}	1000	mA
Reverse Voltage	V_R	5	V
Operating Temperature	T_{opr}	-40~+85	°C
Storage Temperature*	T_{stg}	-40~+85	°C
Soldering Temperature	T_{sol}	260	°C

* 4mm from mold body less than 5 seconds

Electrical Optical Characteristics:

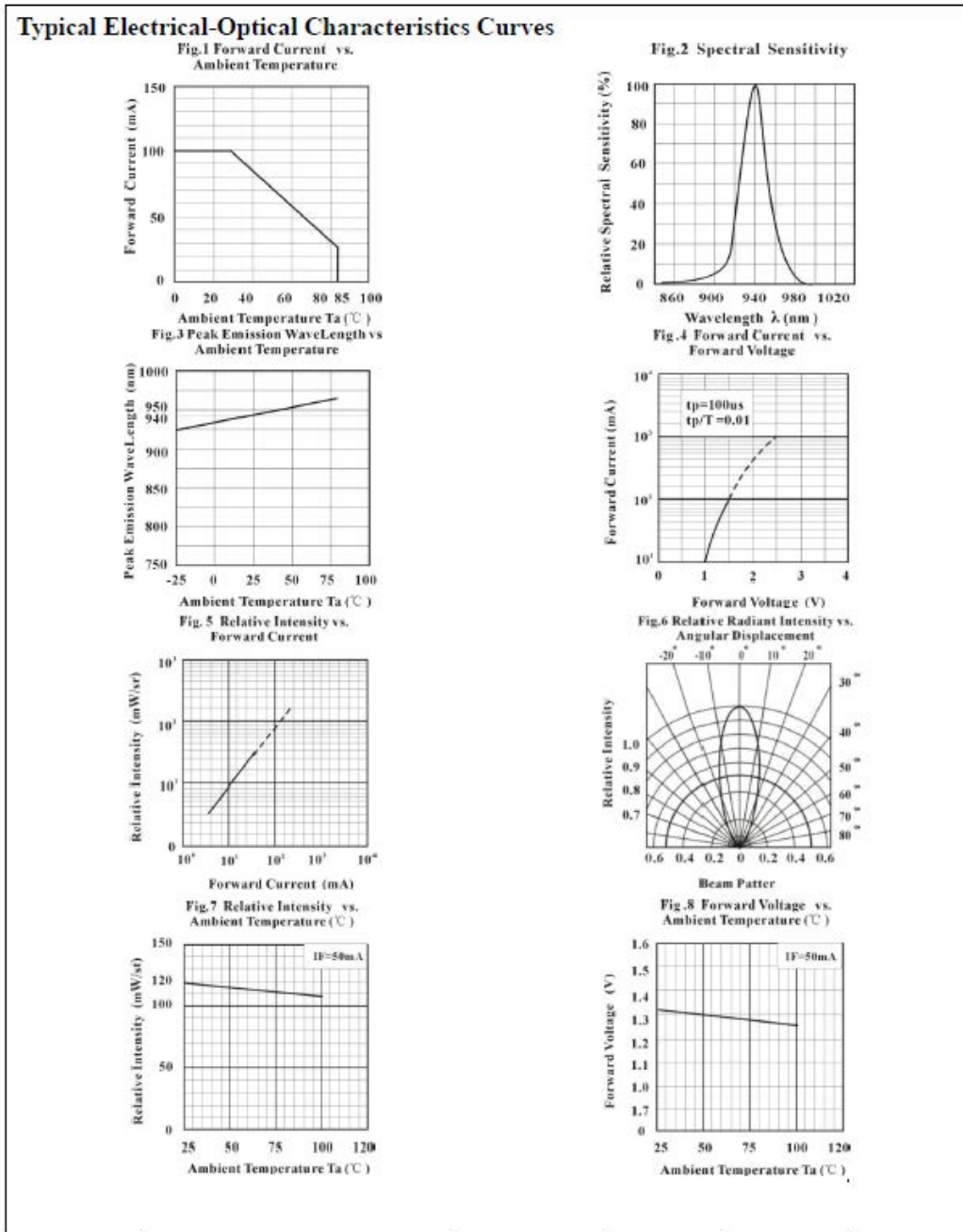
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Forward Voltage	V_F		1.35	1.50	V	$I_F=50mA$
Radiant Intensity	I_e	60	76		mW/sr	$I_F=50mA$
Peak Wavelength	λ_P		940		nm	$I_F=50mA$
Reverse Current	I_R			10	μA	$V_R=5V$
Viewing Angle	θ		30		deg	$I_F=50mA$

Datasheet

Item no. 1567235

V1_0917_01_en

IR diode



This is a publication by Conrad Electronic SE, Klaus-Conrad-Str. 1, D-92240 Hirschau (www.conrad.com).

All rights including translation reserved. Reproduction by any method, e.g. photocopy, microfilming, or the capture in electronic data processing systems require the prior written approval by the editor. Reprinting, also in part, is prohibited. This publication represents the technical status at the time of printing.

© Copyright 2017 by Conrad Electronic SE.