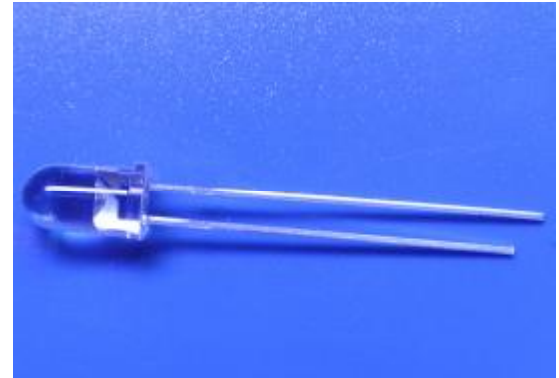




HL-503IR3C-L3



Features

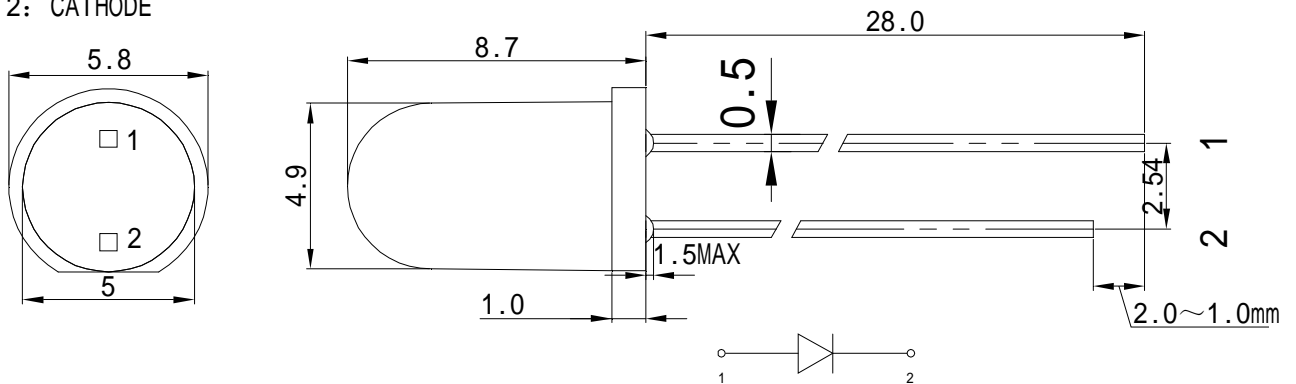
- Mechanically and spectrally matched to the phototransistor.
- Rohs compliant.

Package Dimensions

Description

This devices are made with PIN GaAs.

- 1: ANODE
2: CATHODE



Tolerance Grade	Dimension Tolerance (UNIT:mm)			
	0.5~3	3~6	6~30	30~120
	±0.1	±0.2	±0.3	±0.5
Chip		Lens Color		
Material	Emitting Color	Water Clear		
GaAs	/			

Selection Guide

Part No	Radiant Intensity(mW/sr) $I_F=50mA$		Viewing Angle
	Min	Typ	2θ1/2 (供参考)
HL-503IR3C-L3	--	60	20

Note:

1. 2θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Tolerance of measurement of luminous intensity±15%.

Electrical / Optical Characteristics at TA=25°C

Item	Symbol	Min	Typ	Units	Test Conditions
Forward Voltage	V_F	1.2	1.5	V	$I_F=50mA$
Reverse Current	I_R	--	10	uA	
Peak Spectral Wavelength	λ_D	--	940	nm	
Spectral Bandwidth	$\Delta \lambda_{1/2}$	--	50	nm	

Note:

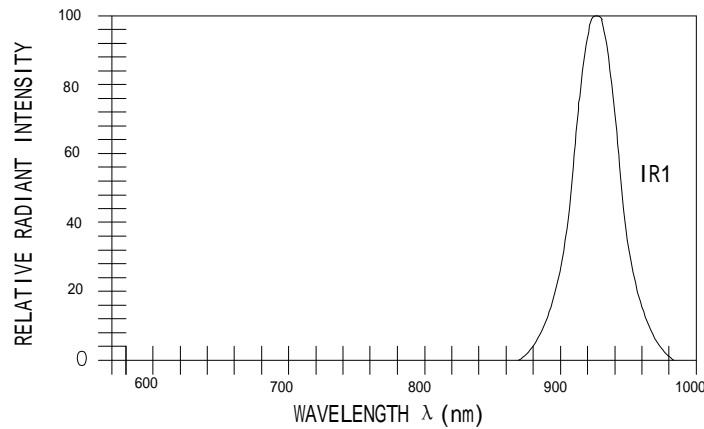
1. Tolerance of measurement of forward voltage±0.1V.
2. Tolerance of measurement of peak Wavelength±2.0nm.

Absolute Maximum ratings at Ta=25°C

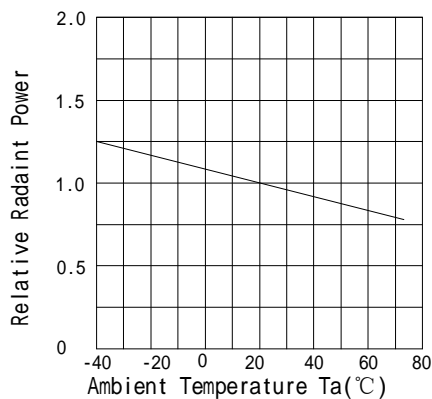
Parameter	Symbol	IR1	Units
Power Dissipation	P_t	100	mW
DC Forward Current	I_F	50	mA
Peak Forward Current[1]	i_{FS}	300	mA
Operating Temperature		-30°C ~80°C	
Storage Temperature		-30°C ~80°C	

Note:

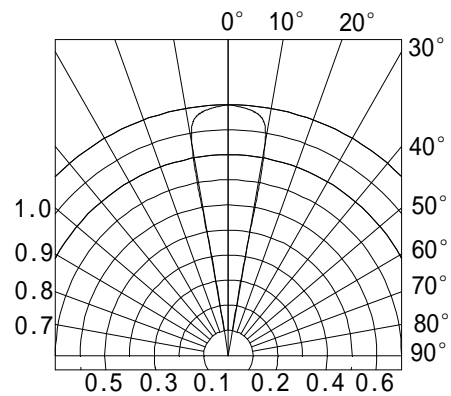
1. IFP Conditions: Pulse Width≤10msec
2. Tsol Conditions: 3mm from the base of the epoxy bulb



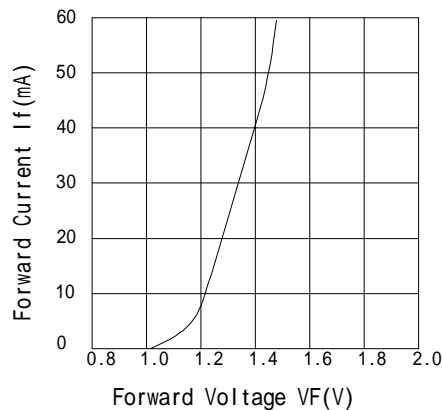
Forward Current vs.Forward Voltage



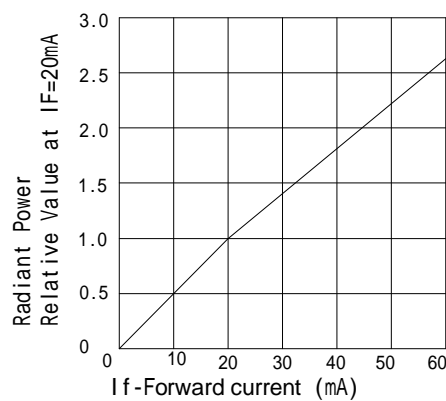
Radint Power Vs.Ambient Temperature



Spatial Distribution



Forward Current Vs.Forward Voltage



Radint Power Vs Forward Current

Remarks:

If special sorting is required (e.g.binning based on forward voltage or radiant intensity/luminous flux),the typical accuracy of the sorting process is as follows:

1. Radiant intensity/Luminous Flux:±15%.
2. Forward Voltage:±0.1V.

Note:Accuracy may depend on the sorting parameters.

Soldering:

1. Manual Of Soldering

The temperature of the iron tip should not be higher than 300°C and Soldering within 3 seconds per solder-land is to be observed.

2. DIP soldering (Wave Soldering):

Preheating: 120°C~150°C, within 120~180 sec.

Operation heating: 245°C ± 5°C within 5 sec. 260°C (Max)

Gradual Cooling (Avoid quenching).

