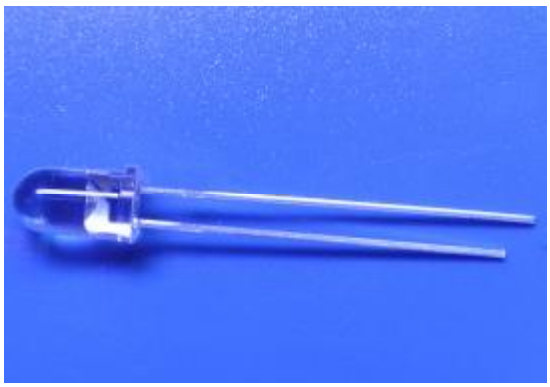
HL-503IR3C-L3



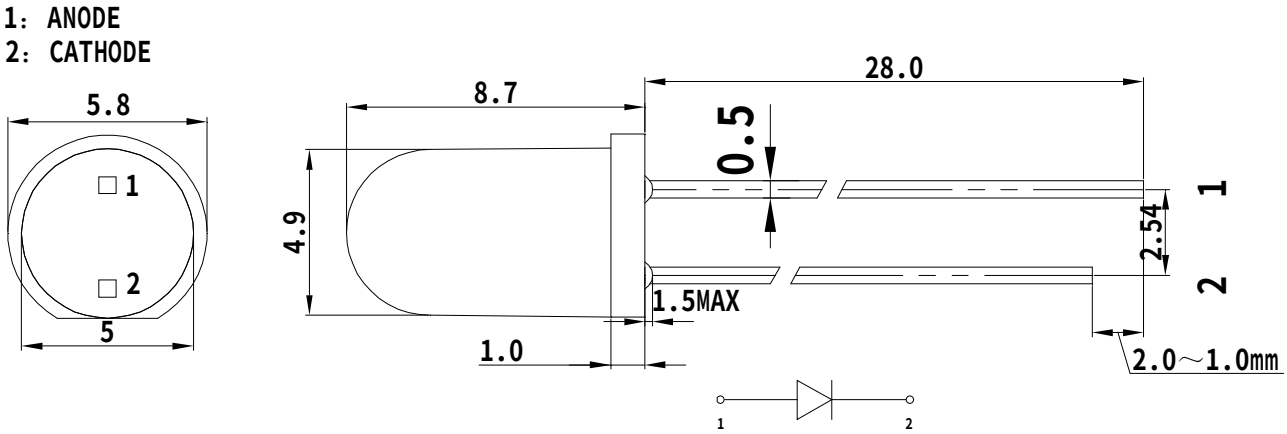
Features

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

Description

This devices are made with PIN GaAs.

Package Dimensions



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	--	71	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

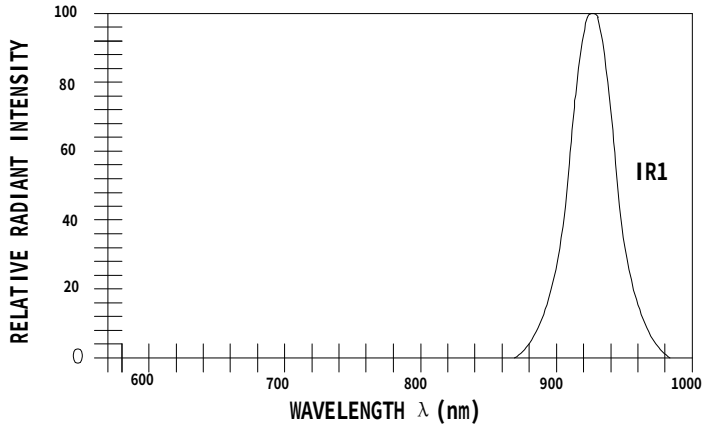
Item	Symbol	Min	Typ	Units	Test Conditions
Forward Voltage	V_F	1.2	1.5	V	I_F=50mA
Reverse Current	I_R	--	10	uA	
Peak Spectral Wavelength	λ_D	--	940	nm	
Spectral Bandwidth	$\Delta\lambda$1/2	--	50	nm	

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

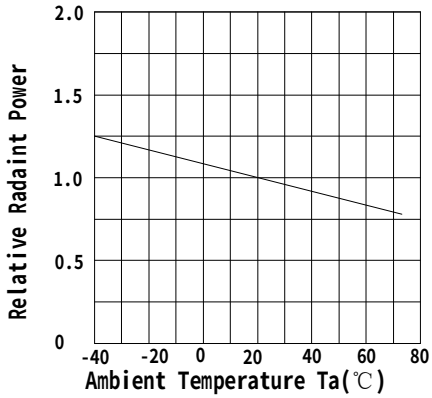
Absolute Maximum ratings at Ta=25℃

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℃~80℃		
Storage Temperature	-30℃~80℃		

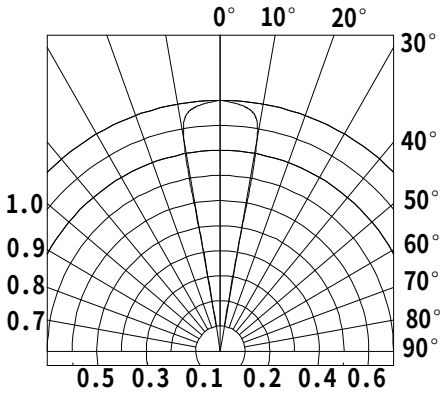
Note:
1.IFP Conditions：Pulse Width≤10msec
2.Tsol Conditions：3mm from the base of the epoxy bulb



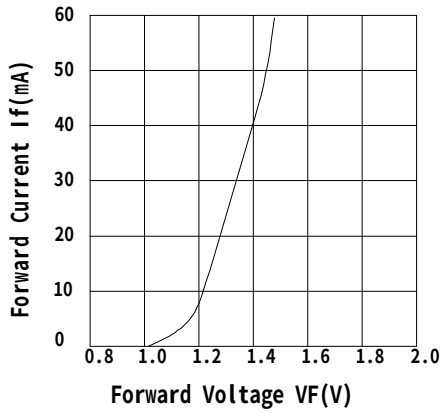
Forward Current vs.Forward Voltage



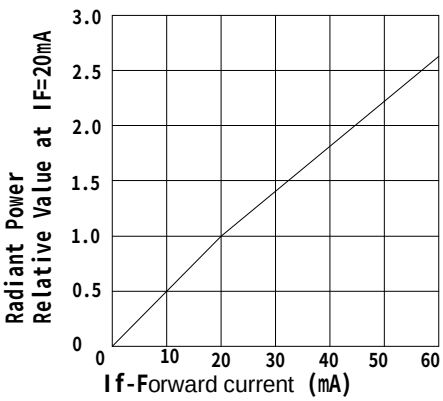
Radint Power Vs.Ambient Temperature



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℃and Soldering within 3 seconds per solder-land is to be observed.
2. DIP soldering (Wave Soldering):
   Preheating:120℃~150℃,within 120~180 sec.
   Operation heating:245℃±5℃ within 5 sec.260℃(Max)
   Gradual Cooling (Avoid quenching).