

XL-ITR8105

技术数据表 Technical Data Sheet

特点 (Characteristic) :

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High reliability High radiant intensity Low forward voltage

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Fast response time High photo sensitivity

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940nm

Cut-off visible wavelength $\lambda_p=940\text{nm}$

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RoHS

Pb.Free RoHS compliant version

*

MSL :2

Moisture sensitivity level MSL : 2 levels

应用领域 (Product application) :

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Slot machines

*

Small home appliances

*

Automatic Sensors

*

Fax machine

*

Scanner



目录

Catalogue

Electrical Characteristics.....1. ;: mD

电性参数

Electrical Characteristics

◆极限参数 Absolute Maximum Ratings (Temperature=25℃):

Parameter		Symbol	Ratings	Unit
Input Emitter	Power Dissipation*1	PD	75	mW
	Continuous Forward Current	IF	50	mA
	Peak Forward Current*2	IFP	1	A
	Reverse Voltage	VR	5	V
Output Detector	Power Dissipation*1	PD	75	mW
	- Collector-Emitter Voltage	VCEO	30	V
	- Emitter-Collector Voltage	VECO	5	V
	Collector Current	IC(on)	20	mA
Operating Temperature		Topr	-20 ~ +85	
Storage Temperature		Tstg	-40 ~ +85	
Lead Soldering Temperature*3		Tsol	260	

(Temperature=25°C) :

Electro-Optical Characteristics (Temperature=25°C):

Parameter		Symbol	Test conditions	Min	Typ	Max	Unit
Input	Forward Voltage	VF	IF=20mA	--	1.2	1.6	V
			IF=100mA*2	--	1.4	1.85	
			IF=1A *2	--	2.6	4.0	
	Perk Wavelength	!!P	IF=20mA	--	940	--	nm
	Reverse Current	IR	VR=5V	--	--	10	~A
Output	Dark Current	ICEO	Ee=0mW/cm ² VCE=20V	--	--	100	nA
	- C-E Saturation Voltage	VCE(SA T)	IC=2mA Ee= 1mW/cm ²	--	--	0.4	V
Transfer Characteristics	Rise Time	tr	VCE=5V IC= 1mA RL= 1000 '	--	15	--	~S
	Fall Time	tf		--	15	--	
	Collector Current	IC(ON)	IF=20mA VCE=5V	8.0	15	--	mA

(Note)

- * 25 below 25 Free Air Temperature
- * 100us 1% Pulse width 100~s,Duty cycle= 1%
- * 2mm 5s 2mm form body for 5 seconds

电压分档:

Voltage grading:

代码 Code	最小值 Min	最大值 Max	单位 Unit	测试条件 Test conditions
R2-4	1.2	1.6	V	IF=20mA

光电流分档:

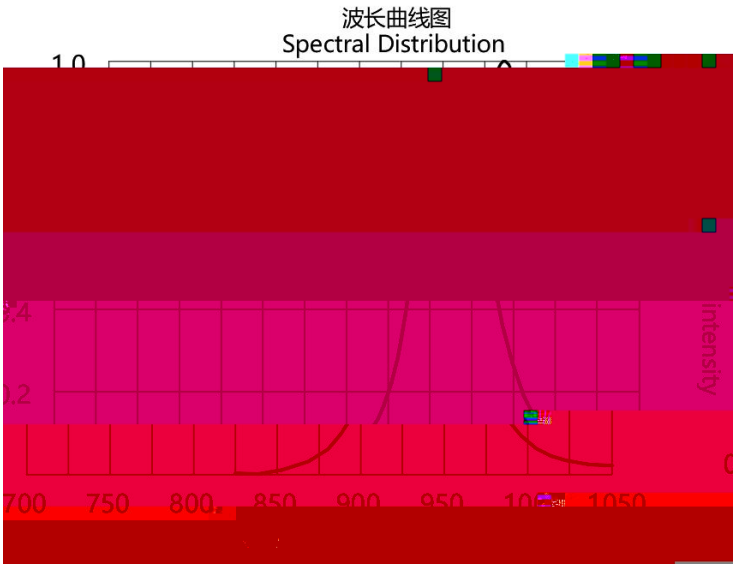
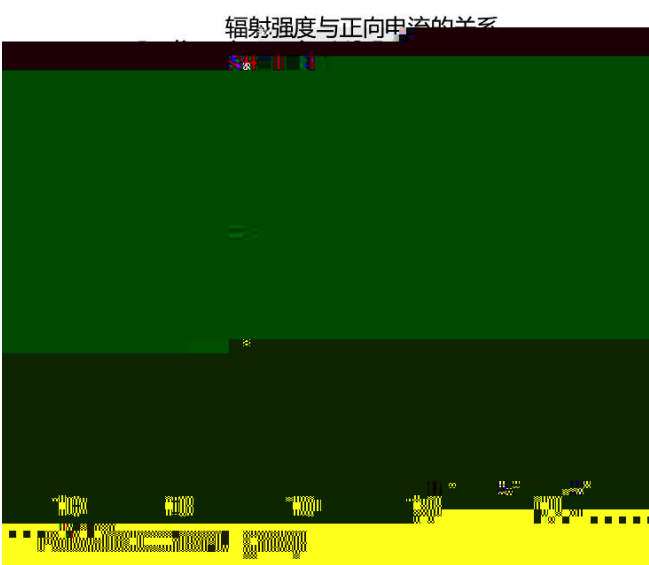
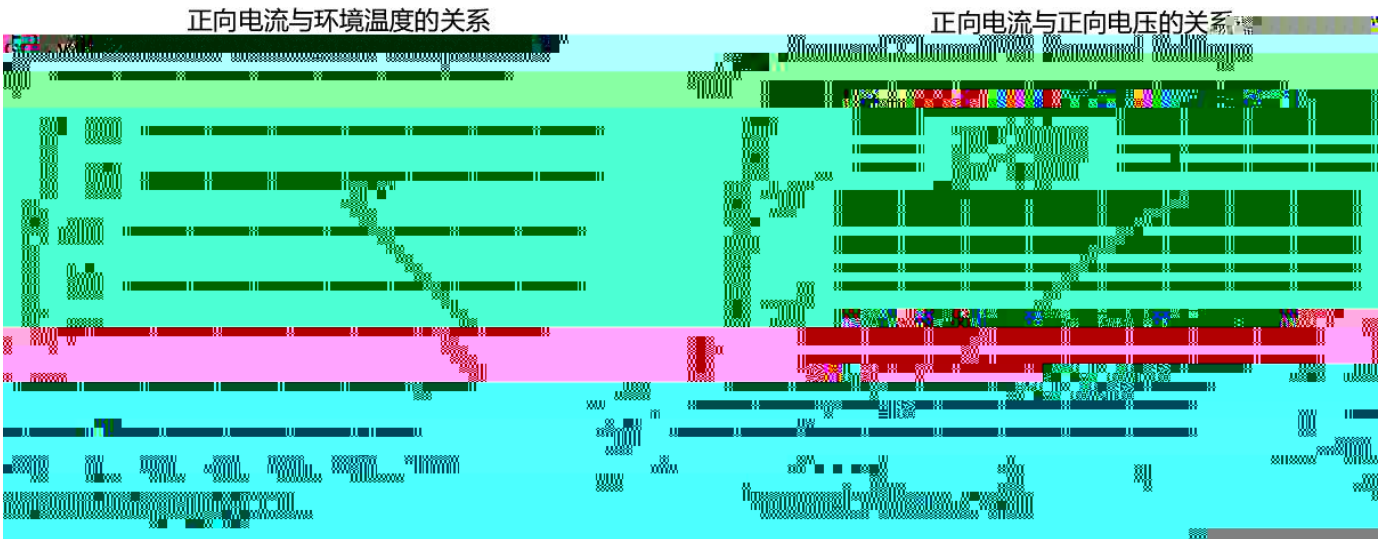
Collector Current grading:

代码 Code	最小值 Min	最大值 Max	单位 Unit	测试条件 Test conditions
IC27-39	8	20	mA	IF=20mA VCE=5V

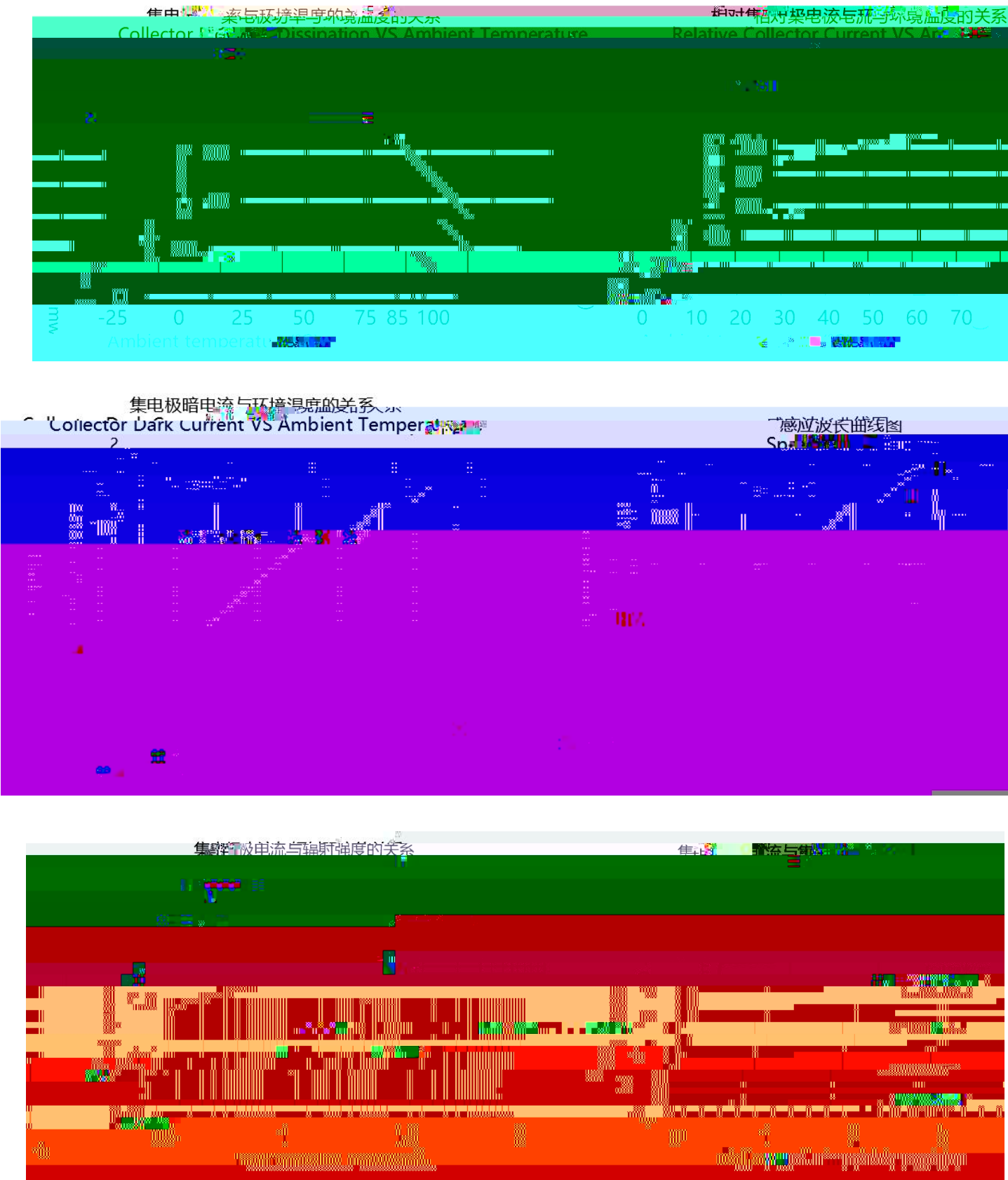
典型特性曲线

Typical Characteristics Curves

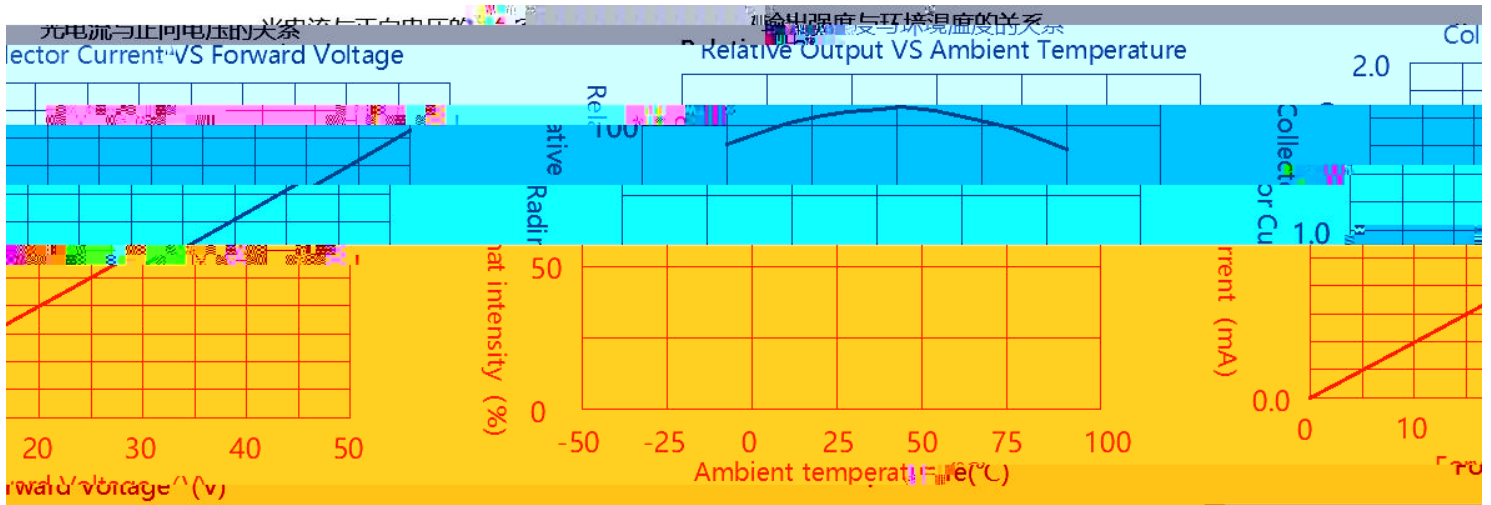
发射管特性曲线图 Typical Electro-Optical Characteristics Curves-IR



接收管特性曲线图

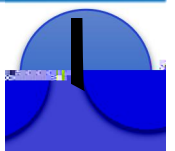
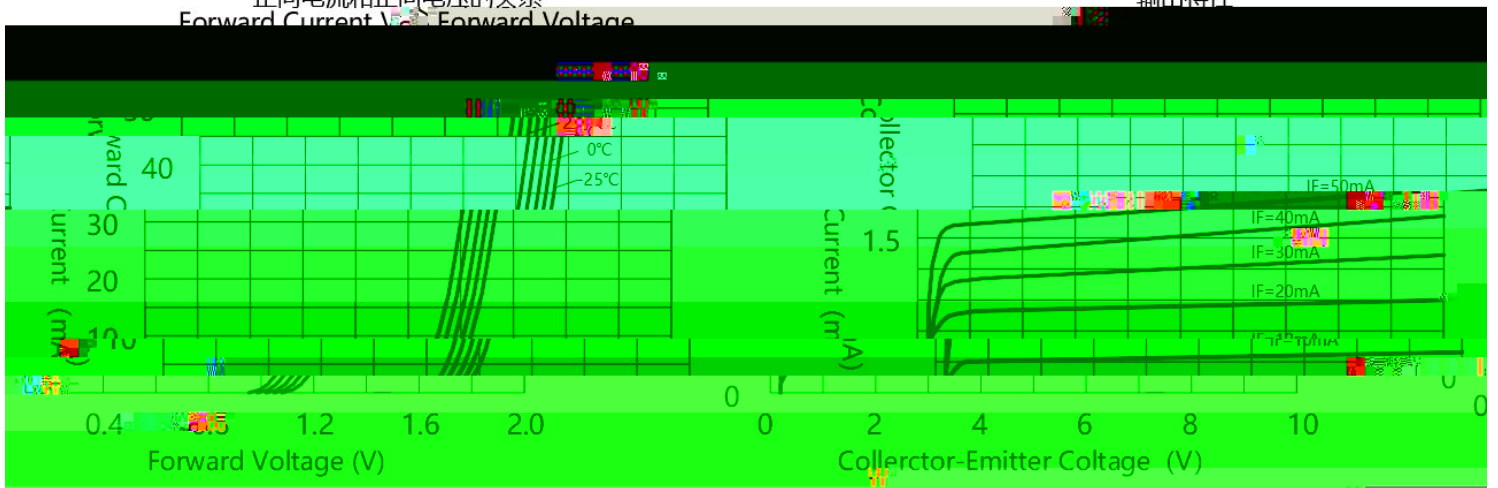


光电开关特性曲线图



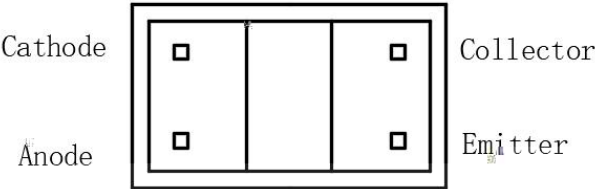
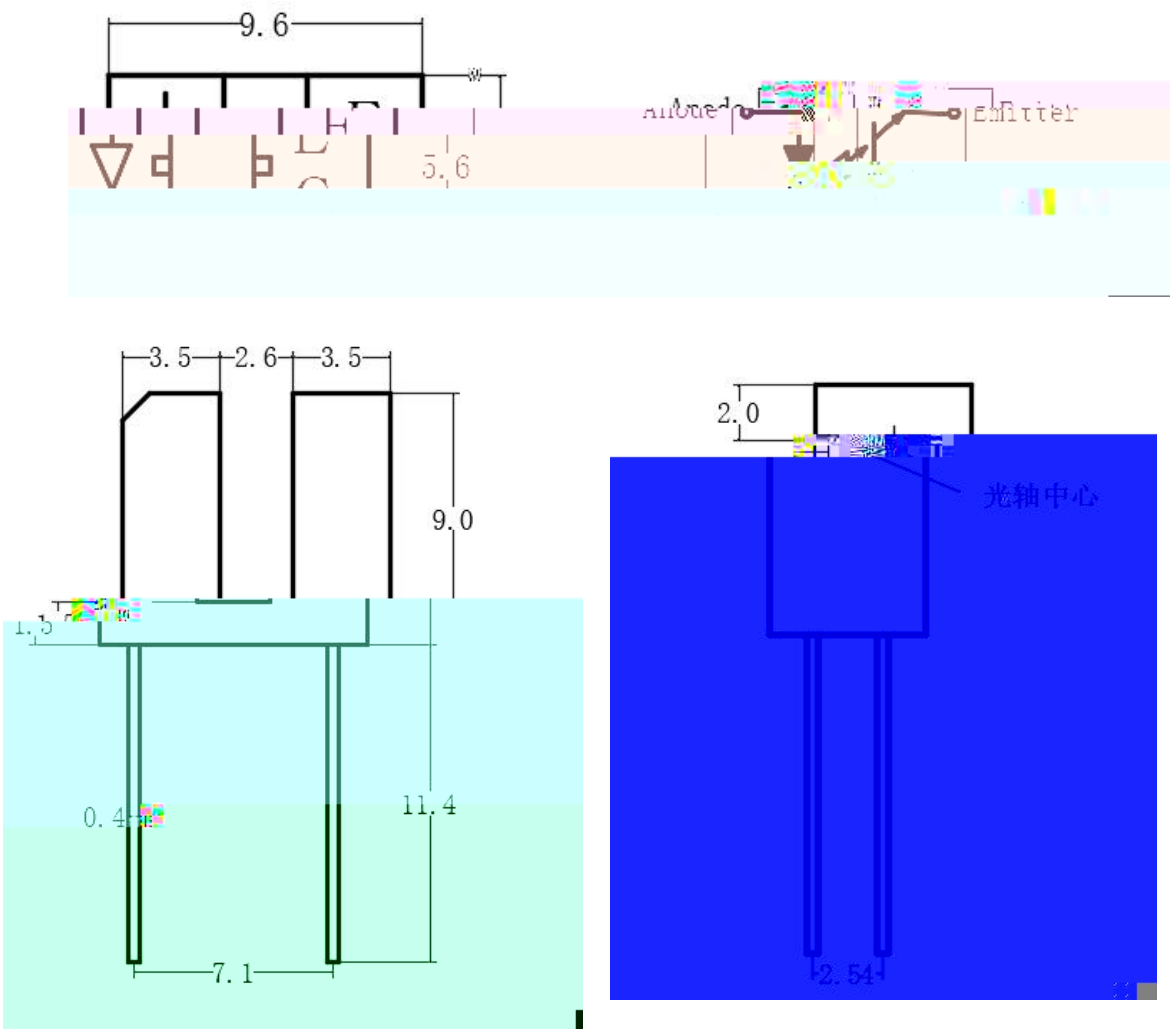
正向电流和正向电压的关系
Forward Current vs Forward Voltage

输出特性
Output Characteristics



外形尺寸

Outline Dimension

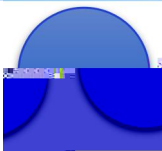


1. mm

Remarks: 1 Unit: mm

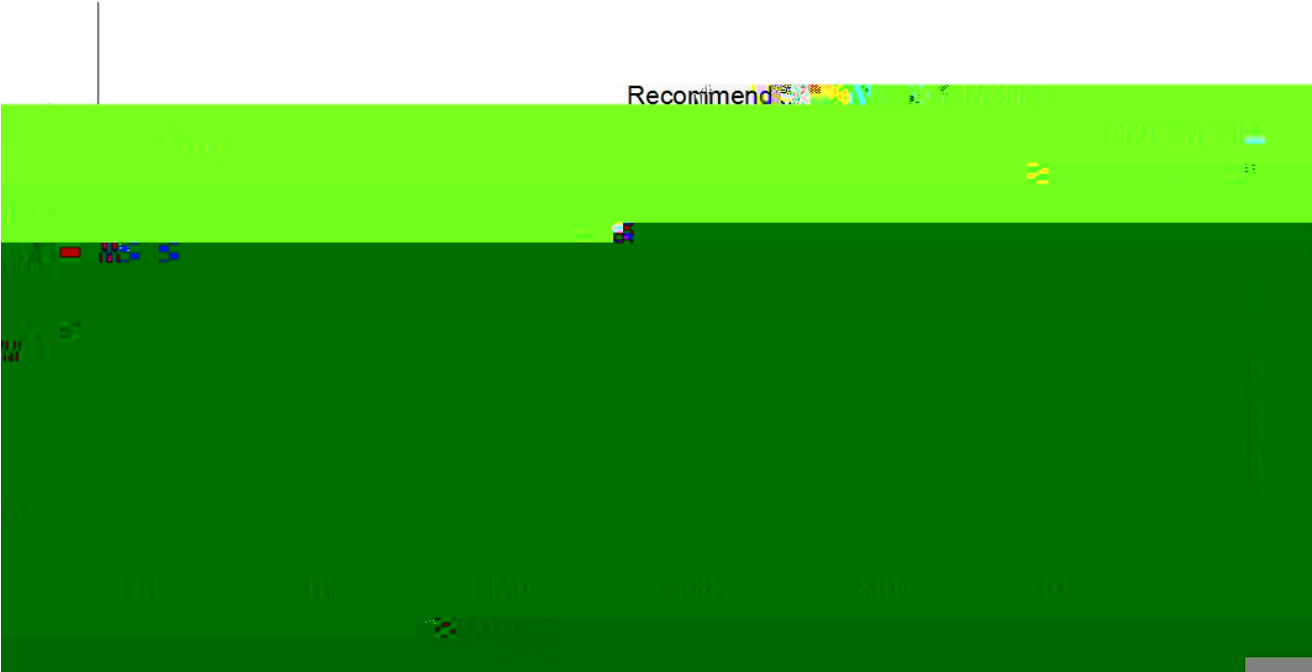
2. 0.3mm

2. Tolerance: 0 0.3mm unless otherwise specified





The wave peak welding curve is recommended :



Note

- 1 Lead solder temperature profile
- 2 Peak temperature

烙铁条件 Soldering Iron

300 3 25W

Each terminal is to go to the tip of soldering iron temperature less than 300 for 3 seconds within once in less than the soldering iron capacity 25W. Leave two seconds and more intervals, and do soldering of each terminal. Be careful because the damage of the product is often started at the time of the hand solder.

手工补数 Repairing

LED ()

LED

Repair should not be done after the LED have been soldered. When repairing is unavoidable, a double-head soldering iron should be used (as below figure). It should be confirmed beforehand whether the characteristics of the LED will or will not be damaged by repairing.



Precautions

IR

IR PT

If there are any modifications to the specification sheet, no further notice will be given