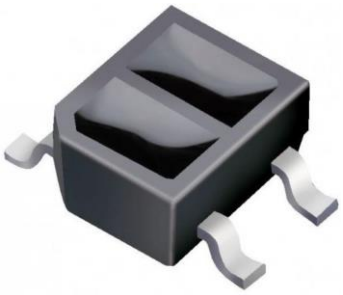
产品介绍/Product Introduction:

NIR1205T是一种小型高性能反射式光电传感器，由红外发光二极管和高灵敏度光电三极管组成。
The NIR1205T is a small size high performance reflective photo sensor,is optically composed of IRED with a high sensitivity phototransistor.

特点/Features:



·可靠性高
High sensitivity

·截止可见光波长
Cut-Off visible wavelength

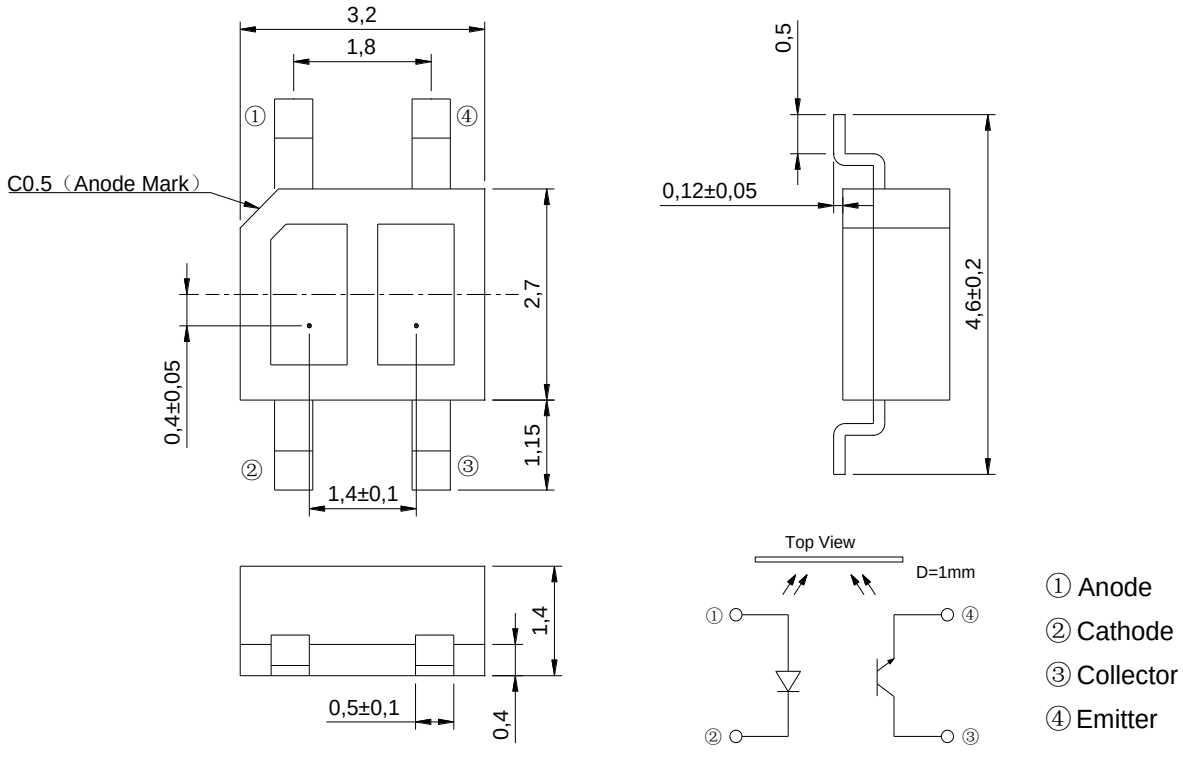
·合规性无卤素（Br<900ppm，Cl<900ppm，Br+Cl<1500ppm）
Compliance Halogen Free(Br < 900ppm, Cl < 900ppm, Br+Cl < 1500ppm)

用途/Application:

·照相机
Camera

·各种微机控制设备
Various microcomputer control equipment

尺寸图/Device Dimensions (mm):



最大极限值/Absolute Maximum Ratings

(Ta= 25℃)

参数 Parameter		符号 Symbo	额定值 Ratings	单位 Unit
输入端 Input	功耗 Power Dssipation	P_D	75	mW
	反向电压 Reverse Voltage	V_R	5	V
	正向电流 Forward Current	I_F	50	mA
输出端 Output	集电极功耗 Collector Power Dissipation	P_C	75	mW
	集电极电流 Collector Current	I_C	50	mA
	集电极-发射极工作电压 Collector-Emitter Voltage	V_{CEO}	30	V
	发射极-集电极工作电压 Emitter-Collector Voltage	V_{ECO}	5	V
工作温度 Operating Temperature		T_{opr}	-25~+85	℃
储存温度 Storage Temperature		T_{stg}	-30~+90	℃
焊接温度*1（距离封装体2mm，时间不超过5秒） Lead Soldering Temperature (2mm form body for 5 seconds)		T_{sol}	260	℃

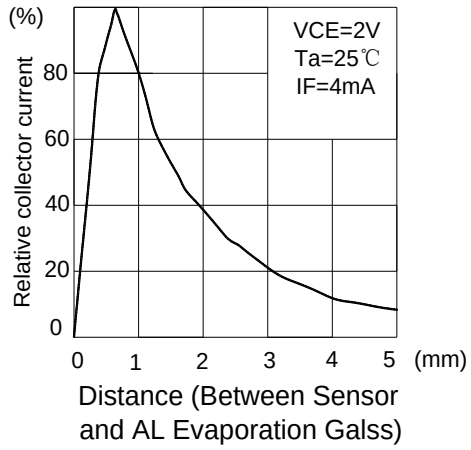
光电特性/Electro-optical characteristics

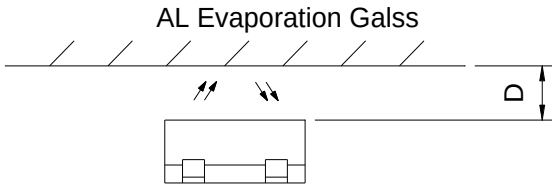
(Ta= 25℃)

项目 Item		符号 Symbol	条件 Condition	最小 Min.	典型 Typ.	最大 Max.	单位 Unit
输入端 Input	正向压降 Forward Voltage	V_F	I_F=20mA	-	1.2	1.6	V
	反向电流 Reverse Current	I_R	V_R=6V	-	-	10	μA
	峰值波长 Peak Wavelength	λ_P	I_F=20mA	-	940	-	nm
输出端 Output	暗电流 Dack Current	I_{CEO}	Ee=0mW/cm2 V_{CE}=10V	-	-	100	nA
	集电极-发射极工作电压 C-E Saturation Voltage	$V_{CE(SAT)}$	I_C=2mA Ee=1mW/cm2	-	-	0.4	V
转换特性 Transfer Characteristics	上升时间 Rise Time	t_r	V_{CE}=2V,I_C=100μA R_L=1kΩ,d=1mm	-	20	-	μS
	下降时间 Fall Time	t_f		-	20	-	μS
	漏电流 Leakage Current	I_{CEOD}	V_{CE}=2V I_F=20mA	-	-	1	μA
	光电流 Collector Current	$I_{C(ON)}$	I_F=10mA V_{CE}=5V	180	-	440	μA

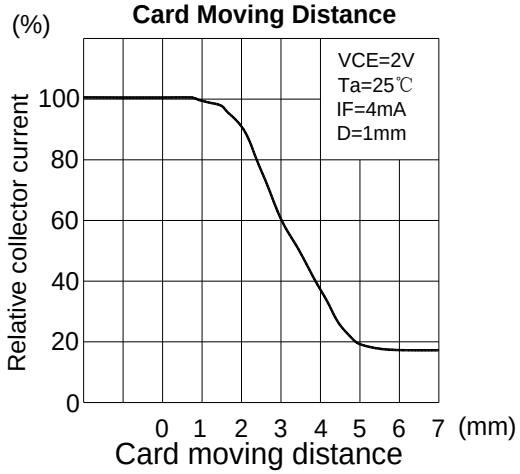
特性曲线/Characteristics Curves

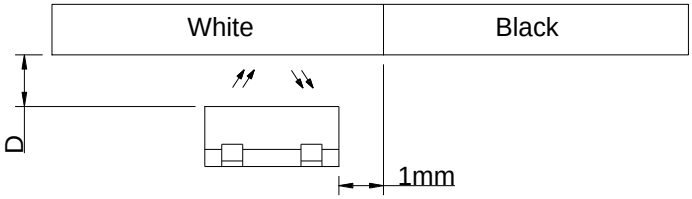
Relative collector current vs Distance(Between Sensor and AL Evaporation Galss)



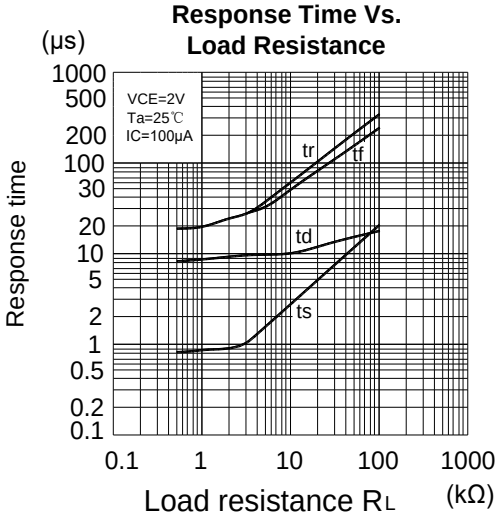


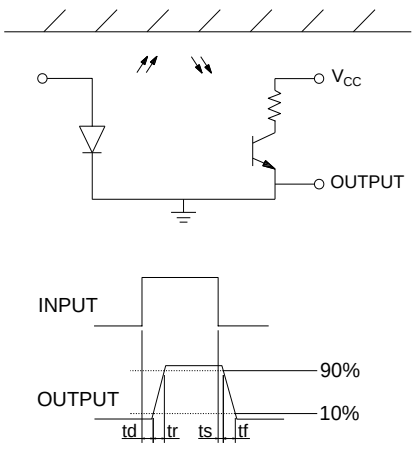
Relative Collector Current vs Card Moving Distance



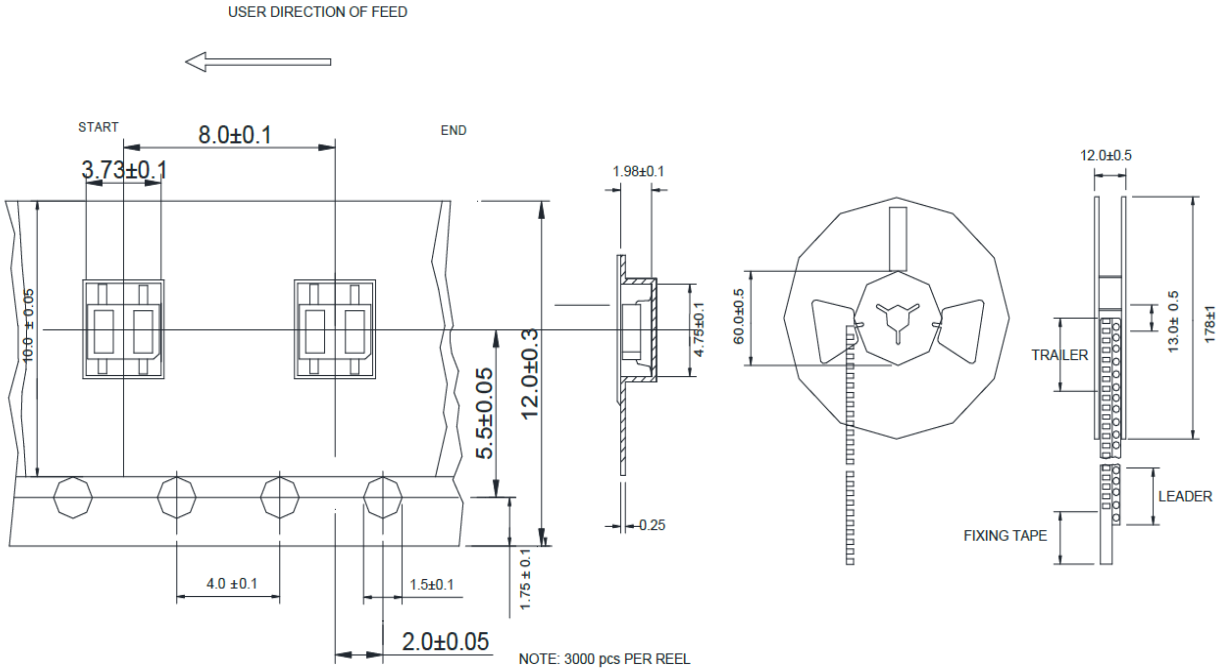


Response Time Vs. Load Resistance

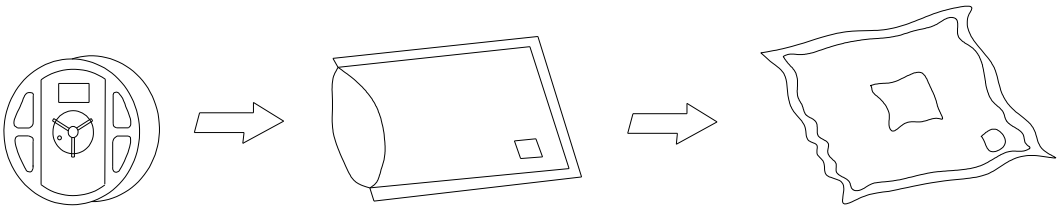




卷轴尺寸 Carrier Tape Dimensions



防潮包装 Moisture Resistant Packaging



注意：
Note:

1.所有尺寸除非另有说明，否则单位均为毫米，公差为±0.2毫米
All Dimensions are in millimeters, Tolerance is ±0.2mm unless otherwise noted .

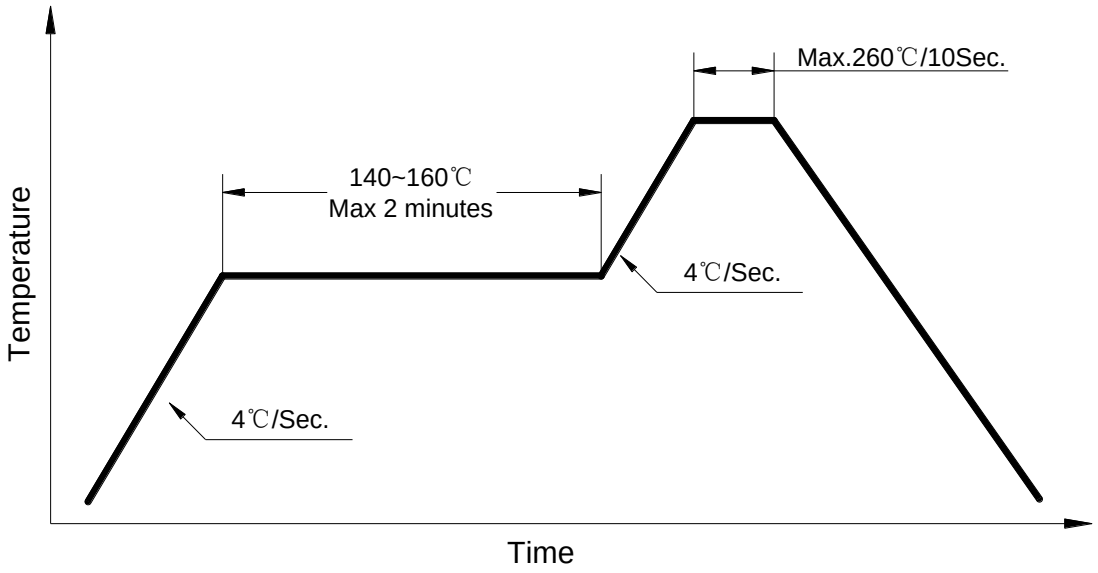
2.规格如有变更，恕不另行通知
Specifications are subject to change without notice.

3. 1,000pcs/盘
1Tape：1000pcs.

4.采用真空、防潮、防静电袋包装
Packing with vacuum moisture-proof and anti-static bags.

5.每个袋内都配有干燥剂
Desiccant are put into the each bag.

回流焊参考曲线/Reflow Soldering Temp:



注意/CAUTION:

1.开启包装前，请按如下条件保存:
Before the bag is opened, please keep the following storage condition:
温度 T=5℃～30℃，湿度 RH<60%，时间 t<12个月。
Temperature: 5℃-30 ℃,Humidity:RH 60% Max ,Time:12 Months.

2.开启包装后，如果器件要进行红外、气相回流焊或其它相似工艺焊接，请按如下方式保存:
After this bag is opened , The device that will be applied to infrared reflow,vapor-phase reflow,or equivalent soldering process must be :
a)保存湿度 RH<20%;
Stored at less than 20% RH;
b)在168小时内可以完成焊接时，保存条件：温度 T<30℃，湿度 RH<60%;
Mounted within 168hours：Temperature: 30℃ Max, Humidity:RH 60% Max;
c）在包装开启时，如果湿度指示卡显示超过30%，请烘烤后再进行回流焊接。
When opened the Bag,the value of Humidity card is exceed 30%,Baking is required before mounting.

3.如果没有满足上述条件，则再次焊接前需要进行烘烤。
If above conditions are not met , baking is required before mounting.
烘烤条件：t=12小时，T=60℃±3℃，RH<5%
Baking condition :12 hours at 60±3℃ and <5% RH.