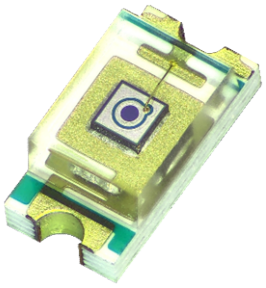
产品介绍 Product introduction

NDT4562是一款小型封装带有高增益高速响应的硅雪崩光电二极管。

The NDT4562 is a Si avalanche photodiode with high operation frequency and high multiplication gain in a small package.

特点 Features



·绿光响应增强
Enhanced green light response

·低击穿电压：60-100V
Low reverse breakdown voltage：60-100V

·有效面积：直径200um
Active area： Diameter 200um

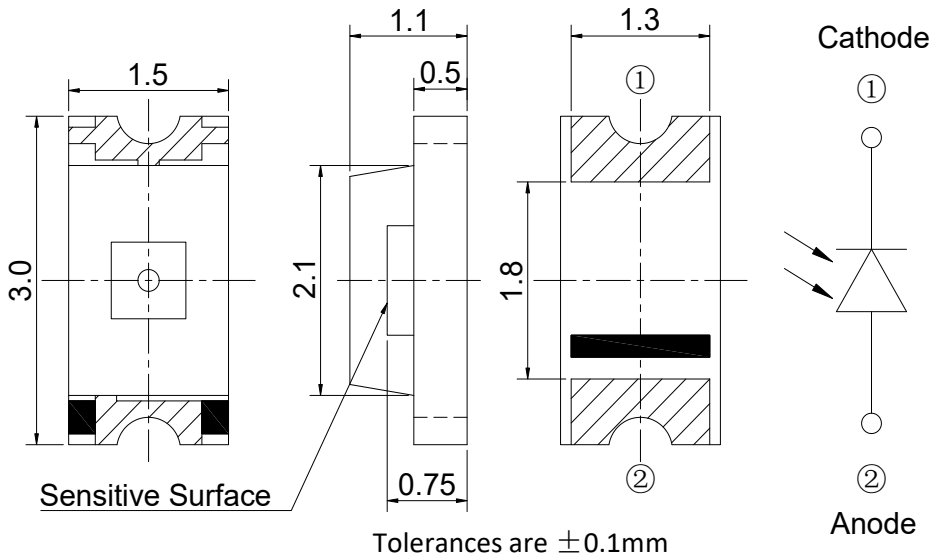
用途 Application

·激光测距，示警，雷达
Laser range finder,alarming,radar

·微弱光学探测
Ultra weak pulse optical detecting

·光通信
Optical communication

产品外形图 DEVICE DIMENSIONS（mm）

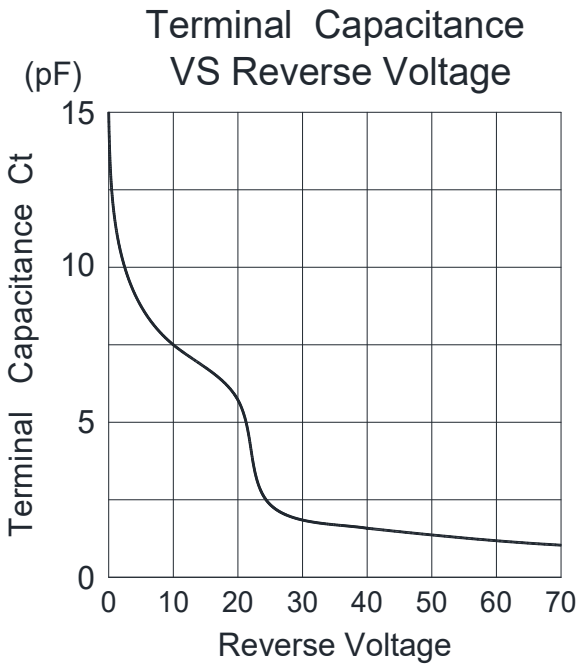


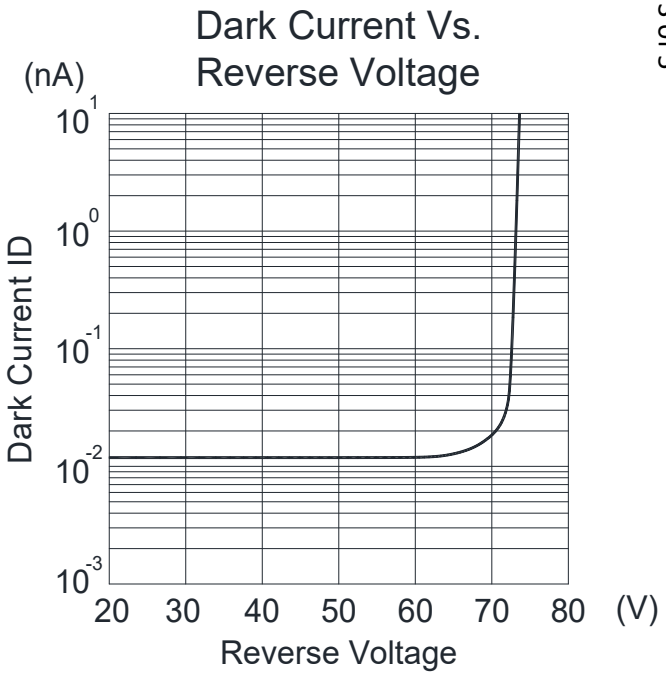
MAXIMUM RATINGS/极限值 (Ta= 25℃)

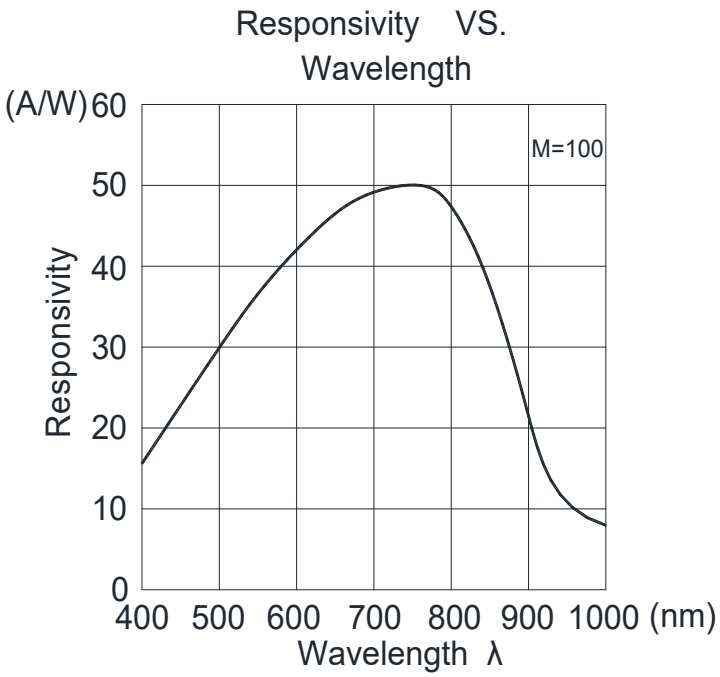
项目 Item	符号 Symbol	额定值 Rating	单位 Unit
正向电流 Forward Current	I_F	1	mA
反向峰值电流 Reverse Current	I_R	0.2	mA
工作温度 Operating temp.	Topr.	-30～+100	℃
存储温度 Storage temp.	Tstg.	-40～+100	℃
焊接温度 Soldering temp.	Tstg.	260	℃

Electro-optical characteristics/光电特性 (Ta= 25℃)

项目 Items	符号 Symbol	条件 Condition	最小 Min.	典型 Typ.	最大 Max.	单位 Unit
光谱响应范围 Response Spectrum	λ	M=1	400	-	1000	nm
峰值响应波长 Peak Sensitivity Wavelength	λ_P	-	-	760	-	nm
响应度 Responsesivity	Re	λ=520nm, M=1	0.3	0.35	-	A/W
反向击穿电压 Reverse Breakdown Voltage	V_{BR}	I_R=100uA	60	-	100	V
击穿电压温度系数 Reverse Breakdown Voltage Temperature Coefficient	δ	-	-	0.45	-	V/℃
暗电流 Dark current	I_D	M=100	-	0.1	1	nA
电容 Capacitance	Ct	M=100,f=1MHz	-	1	-	pF
放大倍数 Gain	M	-	-	100	-	-

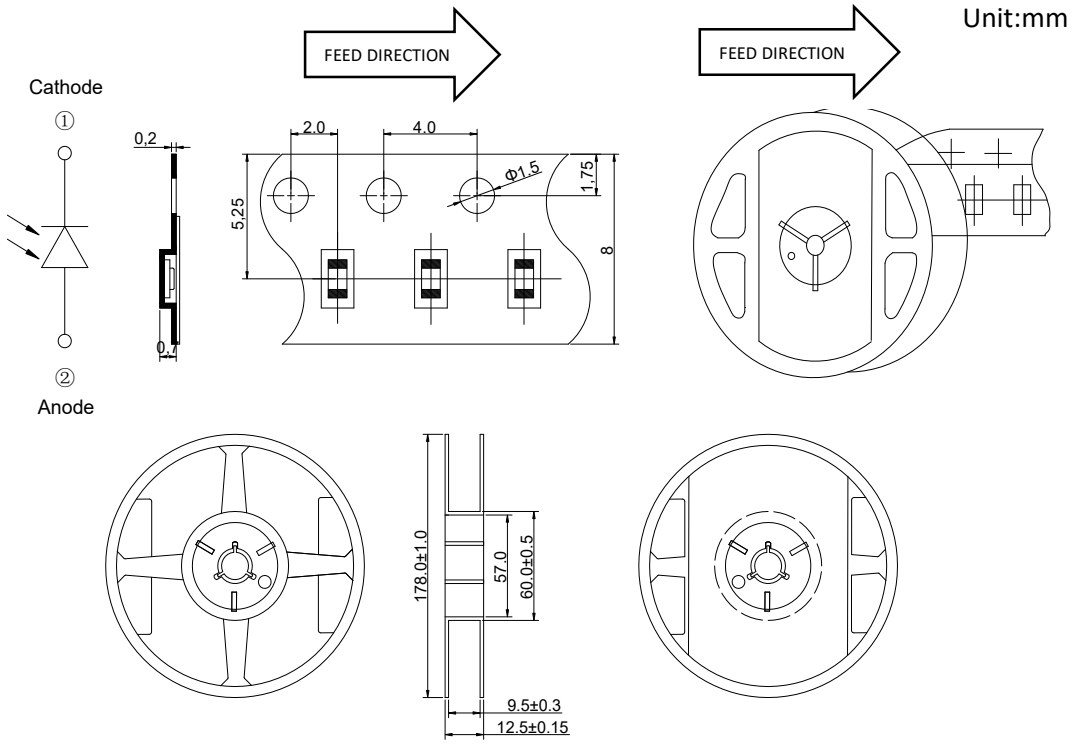

Terminal Capacitance
VS Reverse Voltage
(pF)
Terminal Capacitance Ct
15
10
5
0
0 10 20 30 40 50 60 70
Reverse Voltage


Dark Current Vs.
Reverse Voltage
(nA)
Dark Current ID
10^1
10^0
10^-1
10^-2
10^-3
20 30 40 50 60 70 80 (V)
Reverse Voltage

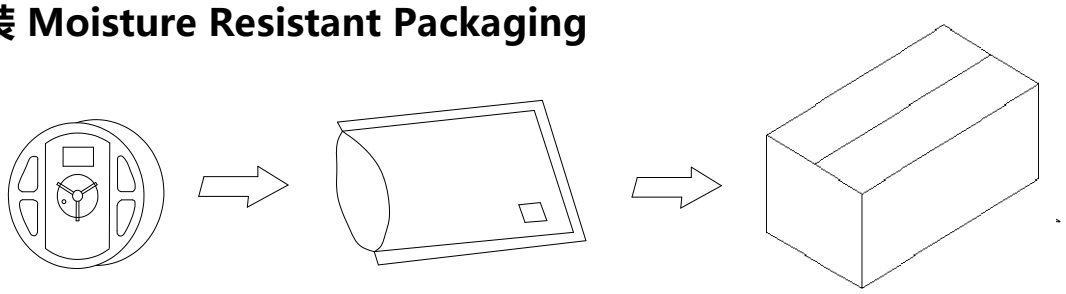

Responsivity VS.
Wavelength
(A/W)
Responsivity
60
50
40
30
20
10
0
M=100
400 500 600 700 800 900 1000 (nm)
Wavelength λ

卷轴尺寸 Carrier Tape Dimensions

Unit:mm



防潮包装 Moisture Resistant Packaging



1 Reel(2,000pcs) 1bag(1Reel) 1box(5 Bag)

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 .

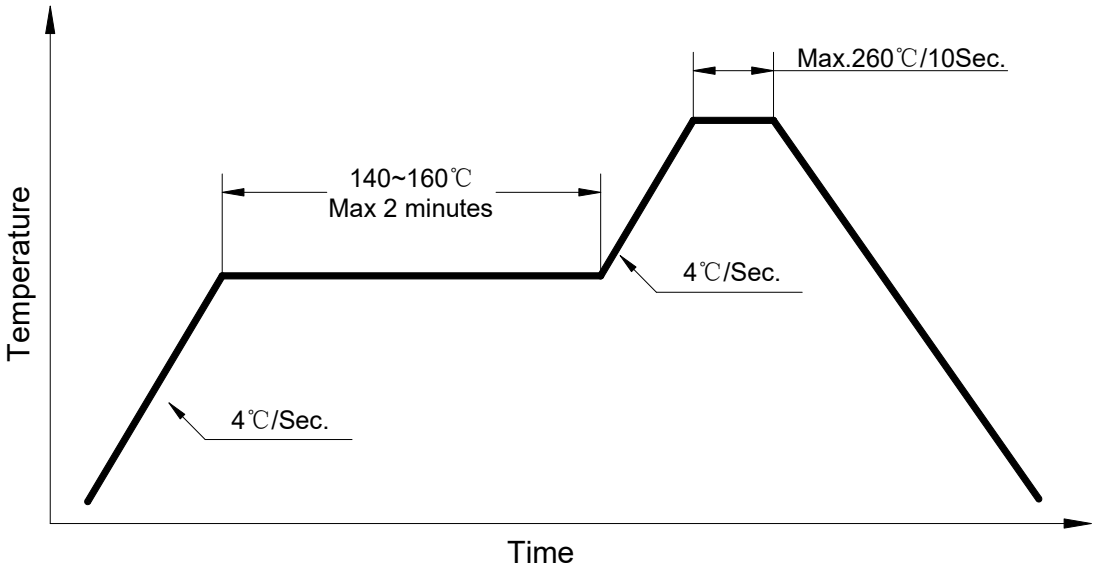
2.规格如有变更，恕不另行通知
Specifications are subject to change without notice.

3.2,000pcs/袋，10,000pcs/箱
1Bag:2,000pcs , 1Box:10,000pcs.

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/Time Profile



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.