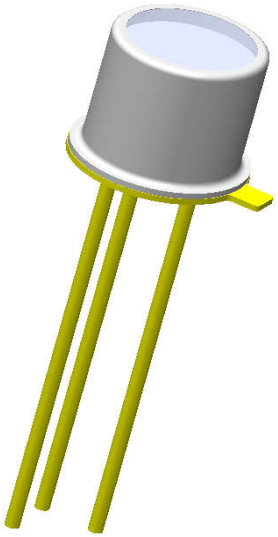
产品介绍/Product Introduction

ND2124是TO18金属封装的光敏三极管。
ND2124 is a TO18 metal-encapsulated phototransistor.

特点/Features

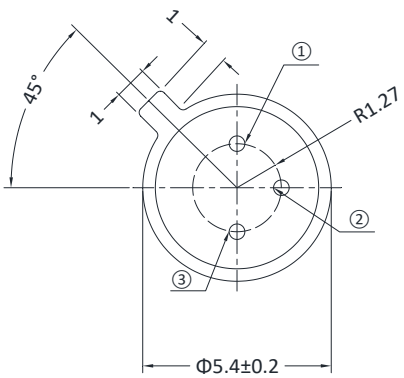
- 带平窗透镜的TO18封装
  TO18 package with flat window lens
- 高可靠性
  High reliability

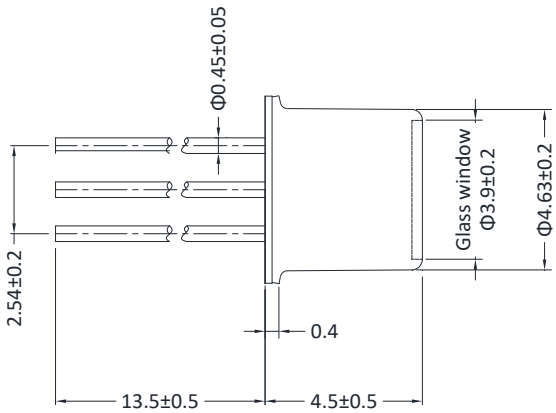


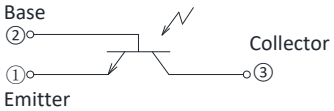
用途/Application

- 光电开关
  Optical switches
- 工业设备
  Industrial machines

尺寸图/Device Dimensions（mm）







极限值/Maximum Ratings

(Ta= 25°C)

项目 Item	符号 Symbol	额定值 Rating	单位 Unit
功耗 Collector Power Dissipation	P_C	150	mW
集电极-发射极电压 Collector-Emitter Voltage	V_{CEO}	60	V
发射极-集电极电压 Emitter-Collector Voltage	V_{ECO}	5	V
集电极电流 Collector Current	I_C	50	mA
工作温度 Operating Temp.	Topr.	-30～+100	°C
存储温度 Storage Temp.	Tstg.	-50～+150	°C
焊接温度*1 Soldering Temp.	Tsol.	260	°C

*1、距离封装边缘2mm，不超过5秒

2mm from the package for Max 5 sceonds

光电特性/Electro-Optical Characteristics

(Ta= 25°C)

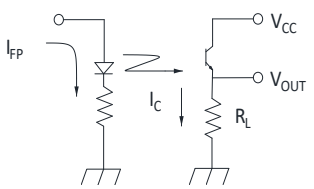
项目 Item	符号 Symbol	条件 Condition	最小 Min.	典型 Typ.	最大 Max.	单位 Unit
暗电流 Dark Current	I_{CEO}	V_{CEO}=10V	-	1	200	nA
光电流 Light Current	I_L	V_{CEO}=10V E_v=200Lx*2	0.3	0.7	-	mA
饱和电压 C-E Saturation Voltage	$V_{CE(sat)}$	I_C=2mA E_V=2000Lx*2	-	0.2	0.4	V
上升/下降时间 Rise Time/Fall Time	tr	V_{CC}=10V I_C=5mA R_L=100Ω*3	-	5	-	μs
	tf		-	5	-	μs
光谱响应 Spectral Sensitivity	λ	V_{CEO}=10V	500 ~ 1050			nm
峰值波长 Peak Wavelength	λ_p	V_{CEO}=10V	-	880	-	nm
半值角 Half Angle	Δθ	V_{CEO}=10V	-	±36	-	deg.

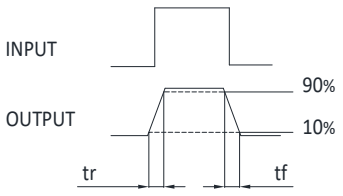
*2、色温= 2856k标准钨丝电灯泡

Color temp. = 2856K standard Tungsten lamp

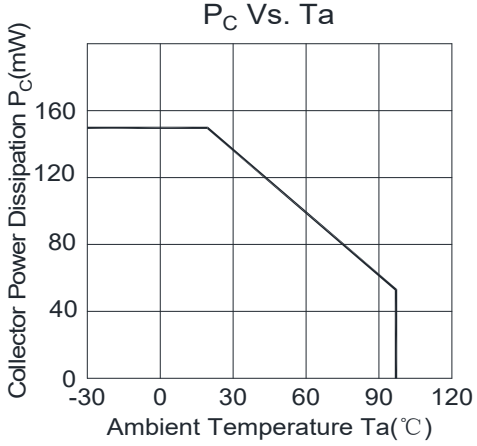
*3、tr和tf测试电路

Test circuit for tr and tf

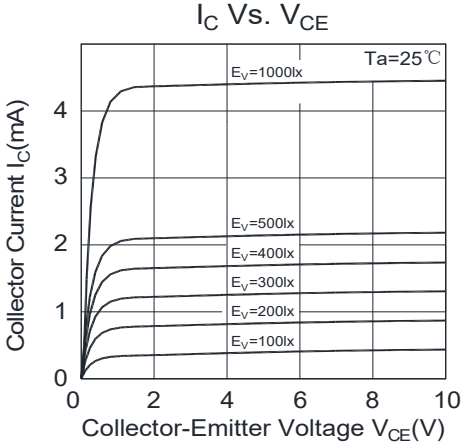




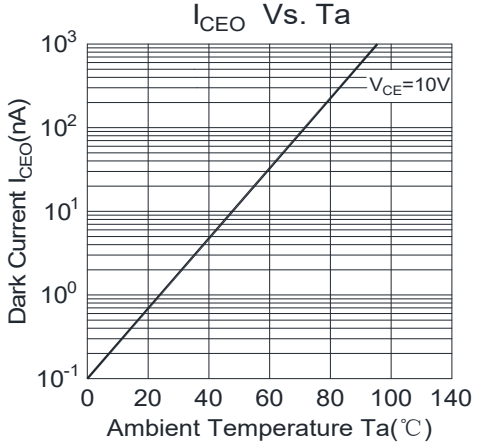
P_C Vs. Ta



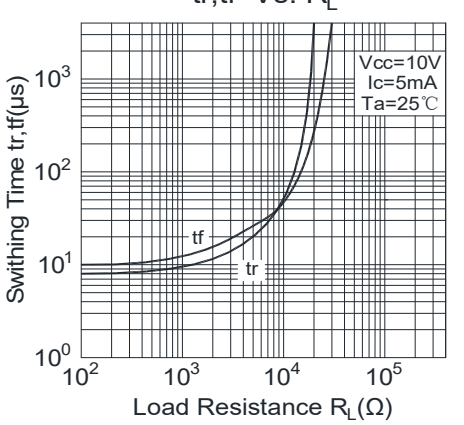
I_C Vs. V_{CE}



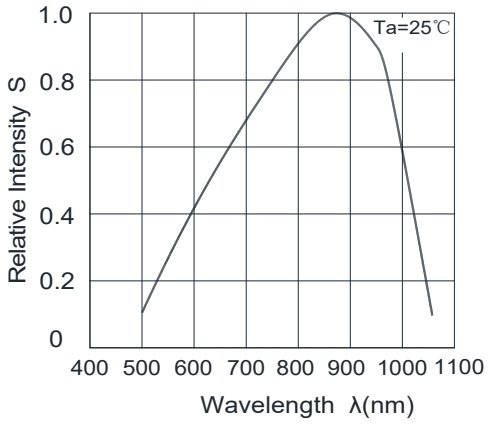
I_{CEO} Vs. Ta



tr,tf Vs. R_L



S Vs. λ



Divergence Angle

