

SST323R-03

Photo Transistor

SST323R-03 is a high sensitivity NPN silicon phototransistor mounted in a black sidelooking package, It is compact and easy to mount.

Features

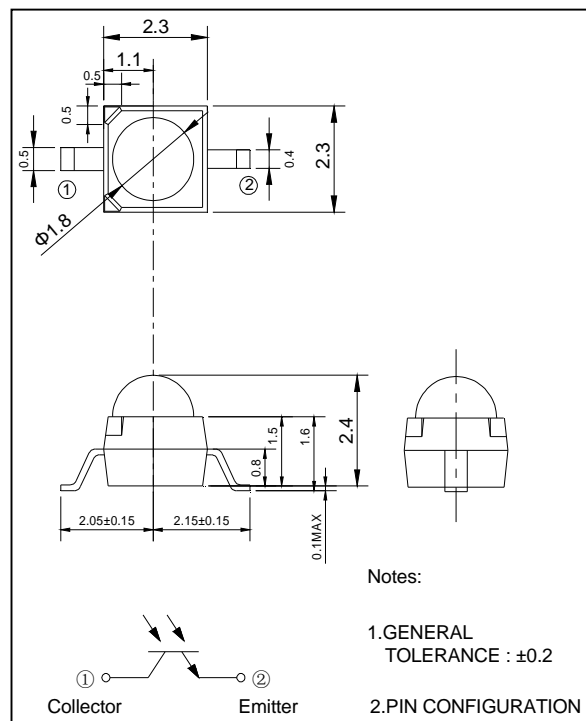
- Compact
- Low-cost
- Sidelooking plastic package

Application

- Photointerrupters
- Optical detectors
- Optical counters

Dimensions

(Unit:mm)



MAXIMUM RATINGS

(Ta= 25°C)

Item	Symbol	Rating	Unit
C-E voltage	V_{CEO}	30	V
E-C voltage	V_{ECO}	5	V
Collector current	I_C	20	mA
Collector power dissipation	P_C	75	mW
Operating temp.	Topr.	-25~+85	°C
Storage temp.	Tstg.	-30~+85	°C
Soldering temp. * 1	Tsol.	260	°C

*1. Lead Soldering Temperature(3mm from case for 5sec)

ELECTRO- OPTICAL CHARACTERISTICS

(Ta= 25°C)

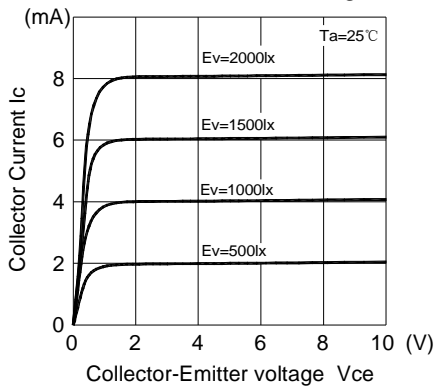
Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Collector dark current	I_{ceo}	$V_{CEO}=10V$	-	-	100	nA
Light current	I_L	$V_{CE}=5V, E_V=1000 \text{ lx}^{*2}$	1.4	-	-	mA
C-E saturation voltage	$V_{ce(sat)}$	$I_C=0.5mA, E_V=2000 \text{ lx}^{*2}$	-	-	0.4	V
Switching speeds Rise time	t_r	$V_{CC}=10V, I_C=5mA, R_L=100\Omega$	-	3.2	-	μsec
Switching speeds Fall time	t_f		-	4.8	-	μsec
Spectral sensitivity	λ		700~1,050			nm
Peak wavelength	λ_p		-	880	-	nm
Half angle	$\Delta\theta$		-	±20	-	deg.

*2. Irradiance by CIE standard light source A (2856K tungsten lamp)

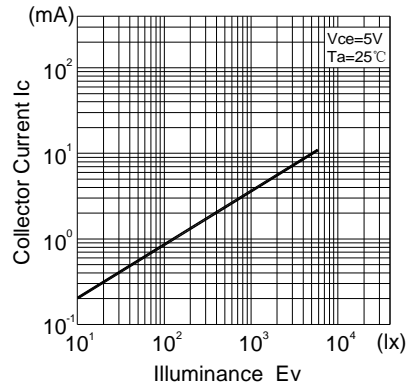
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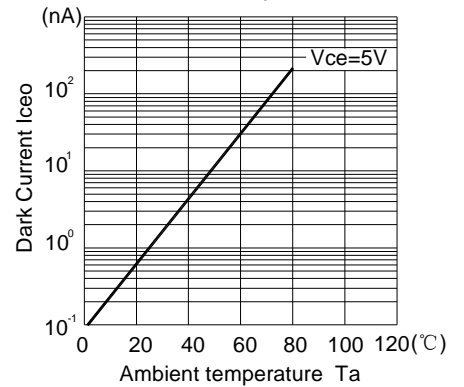
Collector current Vs. Collector-Emitter Voltage



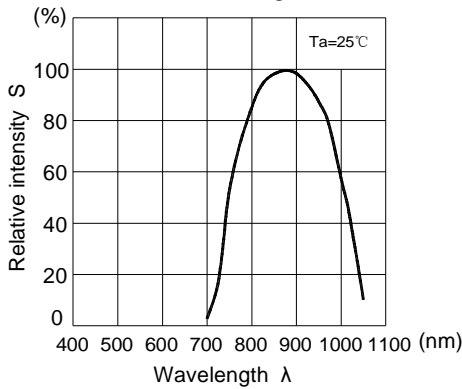
Collector current Vs. Illuminance



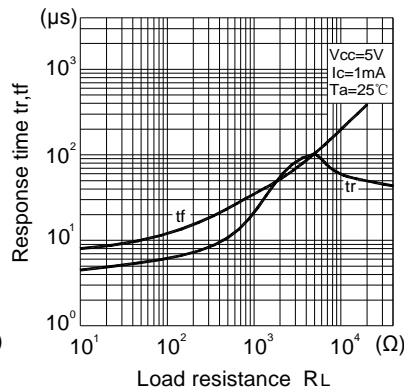
Dark Current Vs. Ambient temperature



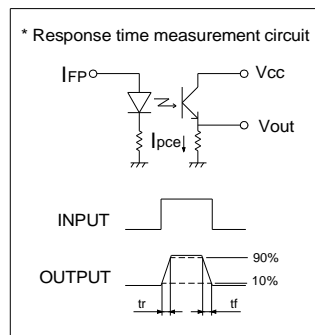
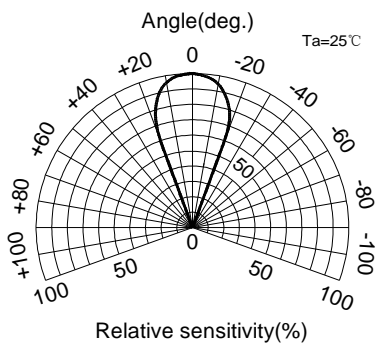
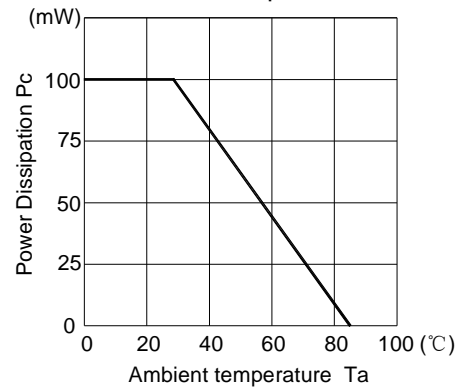
Relative sensitivity Vs. Wavelength



Response time Vs. Load resistance



Power Dissipation Vs. Ambient Temperature



Packing Specification

- 1.Fixed quantity (5000pcs) of the products are packed into plastic reel
- 2.Tow reels of the products are put into box
- 3. Five boxes are put into #3 box (max 50,000pcs)
- 4. Packing slit is pasted on the out box

