

PT - 23G

The PT - 23G, a high - output NPN silicon photodarlington mounted in a clear sidelooking package, is compact, low profile and easy to mount.

FEATURES

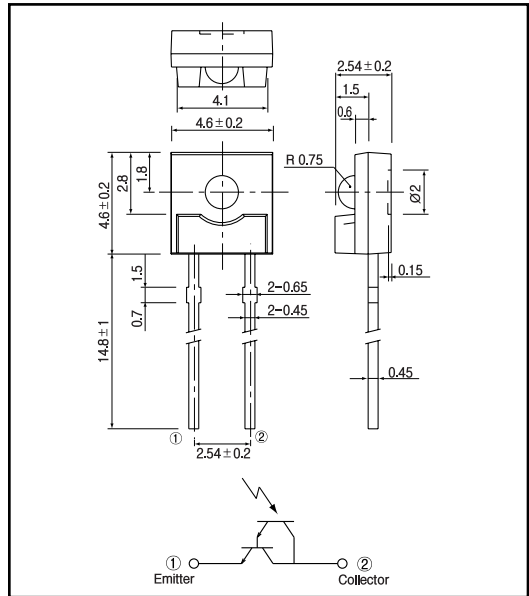
- Low profile package
- Compact
- Low - cost
- Side looking plastic package

APPLICATIONS

- Optical counters
- Optical detectors
- Tape - end sensors

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25)

Item	Symbol	Rating	Unit
C - E voltage	V _{CEO}	30	V
E - C voltage	V _{ECC}	4	V
Collector current	I _C	50	mA
Collector power dissipation	P _C	150	mW
Operating temp.	T _{opr.}	- 20 ~ + 100	
Storage Temp.	T _{stg.}	- 20 ~ + 100	
Soldering temp. *1	T _{sol.}	260	

*1. For MAX.5 seconds at the position of 2 mm from the package

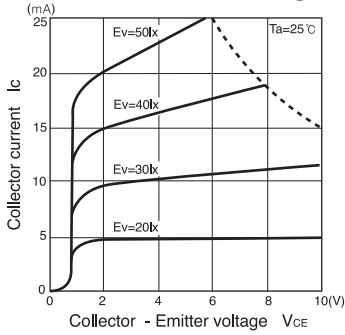
ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25)

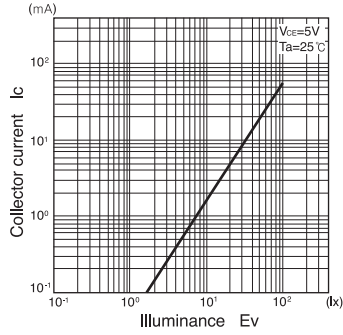
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Collector dark current	I _{CEO}	V _{CEO} = 10V			1.0	μA
Light current	I _L	V _{CE} = 5V, 200lx ²	5			mA
C - E saturation voltage	V _{CE(sat)}	I _C = 1mA, 1,000lx ²			1.4	V
Switching speeds	Rise time	V _{CC} = 10V, I _C = 5mA, R _L = 100		65		μsec.
	Fall time			75		μsec.
Spectral sensitivity				480 - 1,000		nm
Peak wavelength	λ _p			800		nm
Half angle				± 30		deg.

*2. Color temp. = 2856K standard Tungsten lamp

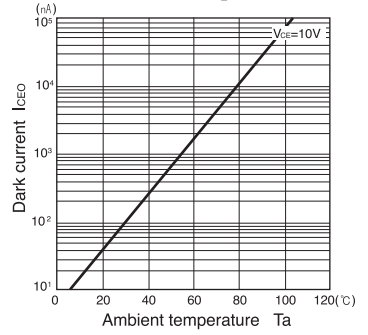
Collector current Vs. Collector - Emitter voltage



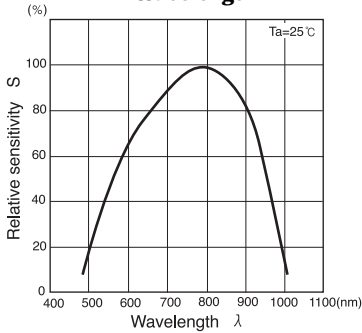
Collector current Vs. Illuminance



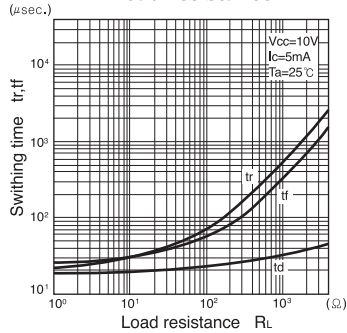
Dark current Vs. Ambient temperature



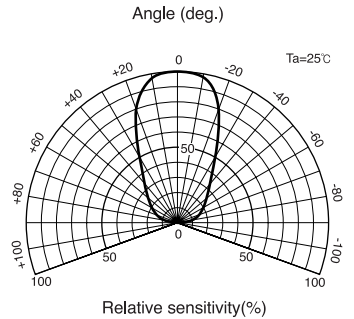
Relative sensitivity Vs. Wavelength



Switching time Vs. Load resistance



Radiant Pattern



Collector power dissipation Vs. Ambient temperature

