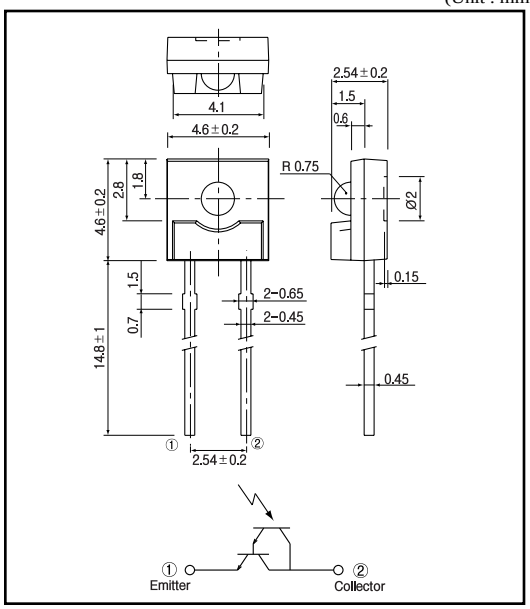
Photo darlingtons

KODENSHI

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.

DIMENSIONS (Unit : mm)



FEATURES

¶ULow profile package
¶UCompact
¶ULow-cost
¶USide looking plastic package

APPLICATIONS

¶UOptical counters
¶UOptical detectors
¶UTape-end sensors

MAXIMUM RATINGS

(Ta=25°C)

Item	Symbol	Rating	Unit
C-E voltage	V_{CEO}	30	V
E-C voltage	V_{ECO}	4	V
Collector current	I_C	50	mA
Collector power dissipation	P_C	150	mW
Operating temp.	Topr.	-20~+100	°C
Storage Temp.	Tstg.	-20~+100	°C
Soldering temp*1.	Tsol.	260	°C

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

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25°C)

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	5			mA
C-E saturation voltage		V_{CE}(sat)	I_L=1mA, 1,000lx			1.4	V
Switching speeds	Rise time	tr	V_{CC}=10V, I_L=5mA, R_L=100Ω		65		μsec.
	Fall time	tf			75		μsec.
Spectral sensitivity		λ			480~1,000		nm
Peak wavelength		λp			800		nm
Half angle		θ			±30		deg.

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

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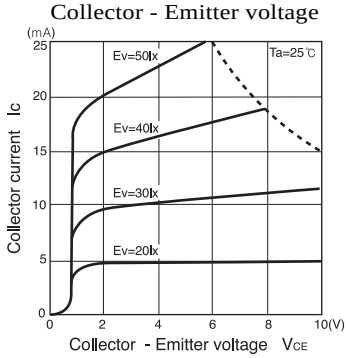
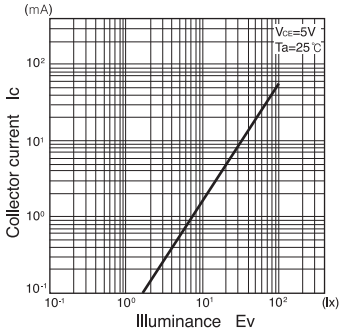
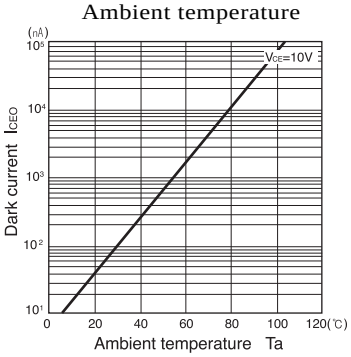
Collector current Vs.
Collector - Emitter voltage



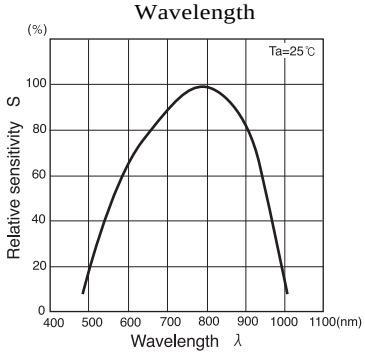
Collector current Vs.
Illuminance



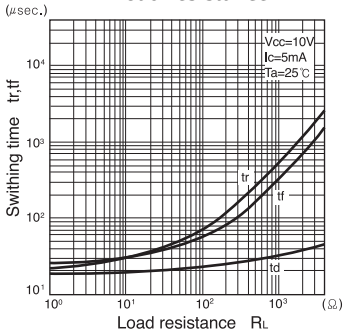
Dark current Vs.
Ambient temperature



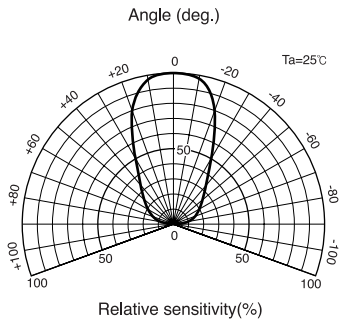
Relative sensitivity Vs.
Wavelength



Swithing time Vs.
Load resistance



Radiant Pattern



Collector power dissipation Vs.
Ambient temperature