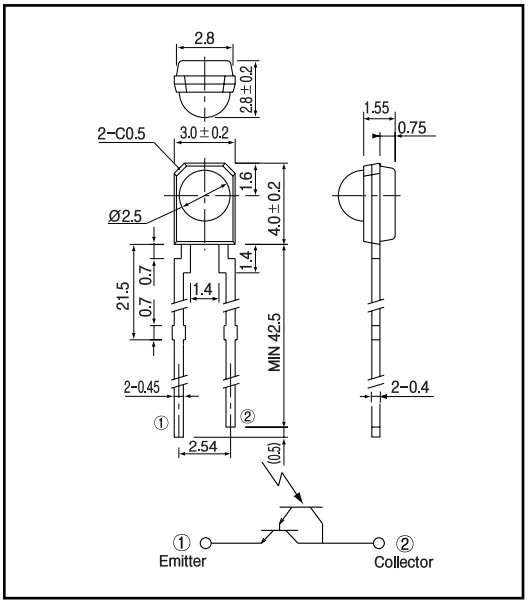
PT - 304R2L

The PT - 304R2, a high - output NPN silicon photodarlington mounted in a clear sidelooking package, is compact, low profile and easy to mount.

DIMENSIONS

(Unit : mm)



FEATURES

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

APPLICATIONS

- Optical counters
- Optical detectors
- Tape - end sensors

MAXIMUM RATINGS (Ta=25℃)

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	75	mW
Operating temp.	Topr.	- 25 ~ + 85	℃
Storage Temp.	Tstg.	- 30 ~ + 85	℃
Soldering temp. *1	Tsol.	260	℃

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

ELECTRO-OPTICAL CHARACTERISTICS (Ta=25℃)

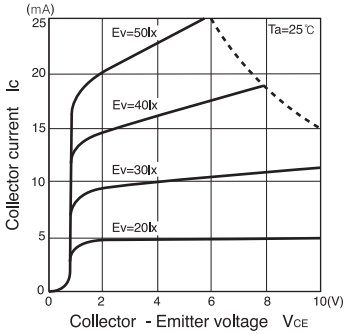
Item		Symbol	Conditions	Min.	Typ.	Max.	Unit.
Collector dark current		I_{CEO}	V_{CEO}=10V			10	μA
Light current		I_L	V_{CE}=5V, 200lx*2	5			mA
C - E saturation voltage		V_{CE}(sat)	I_C=1mA, 1,000lx*2			1.4	V
Switching speeds	Rise time	tr	V_{CC}=10V		65		μsec.
	Fall time	tf	I_C=5mA		75		μsec.
Spectral sensitivity		λ	R_L=100Ω		700~1,000		nm
Peak wavelength		λp			850		nm
Half angle		△θ			±40		deg.

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

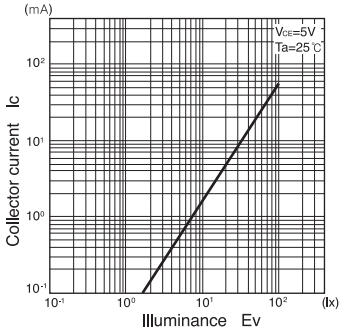
Photo darlingtons

PT - 304R2L

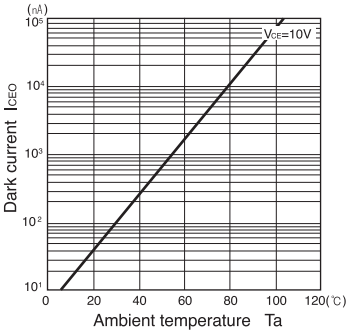
Collector current Vs. Collector - Emitter voltage



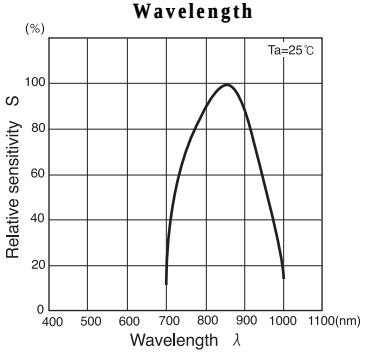
Collector current Vs. Illuminance



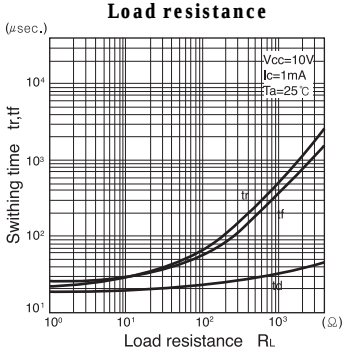
Dark current Vs. Ambient temperature



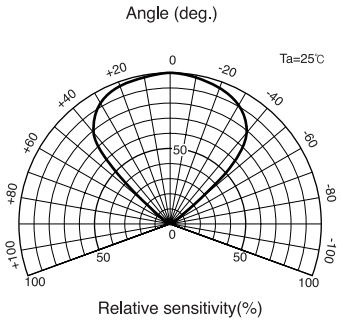
Relative sensitivity Vs. Wavelength



Swithing time Vs. Load resistance



Radiant Pattern



Collector power dissipation Vs. Ambient temperature