OHT10CB

Photo transistors

The OHT10CB is a high-sensitivity NPN silicon phototransistor mounted in durable, hermetically sealed TO-18 metal can which provide years of reliable performance, even under demanding conditions such as use outdoors.

FEATURES

- Narrow angular response
- Durable
- High reliability in demanding environments
- Two leads(Collector, Emitter)

APPLICATIONS

- Optical counters
- Optical detectors
- Infrared sensors
- Encoders
- Smoke detectors

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25℃)

Item		Symbol	Cond.	Min.	Typ.	Max.	Unit
Collector dark current		I_{CEO}	V_{CEO}=10V		1	200	nA
Light current		I_L	V_{CE}=10v,200Lux	1.5	6.0	16	mA
C-E saturation voltage		V_{ce}(sat)	Ic=5mA,2000Lux		0.2	0.4	V
Switching speeds	Rise time	tr	Vcc=10v,Ic=5mA		8.0		usec.
	Fall time	tf	RL=100Ω		10		usec.
Spectral sensitivity		λ		500~1,050			nm
Peak wavelenght		λp			880		nm
Half angle		Δ Θ			±15		deg.

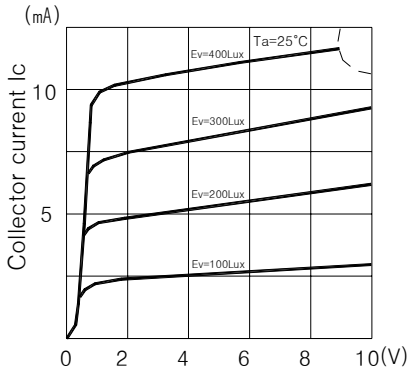
MAXIMUM RATINGS

(Ta=25℃)

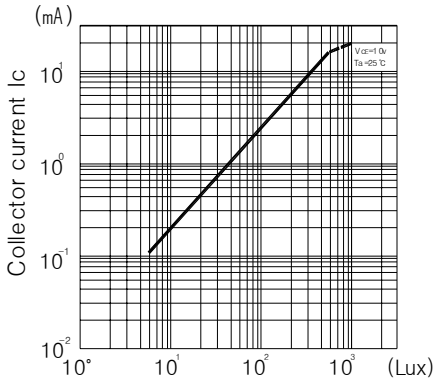
Item	Symbol	Rating	Unit
C-E voltage	V_{CEO}	40	V
E-C voltage	V_{ECO}	4	V
Collector current	Ic	50	mA
Collector power dissipation	PD	150	mW
Operating temp.	Topr.	-30～+125	℃
Storage temp.	Tstg.	-50～+150	℃
Soldering temp.(1)	Tsol.	260	℃

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

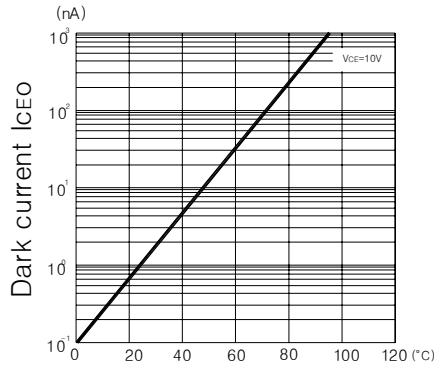
■ Collector current Vs Collector-Emitter voltage



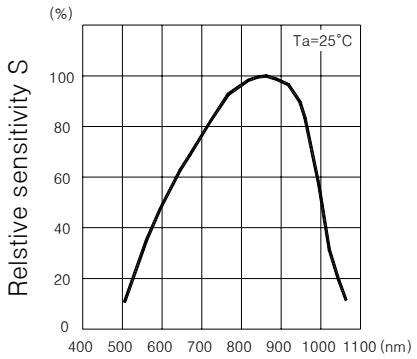
■ Collector current Vs illuminance



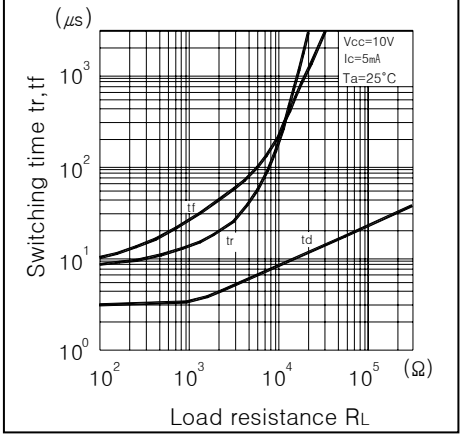
■ Dark current Vs Ambient temperature



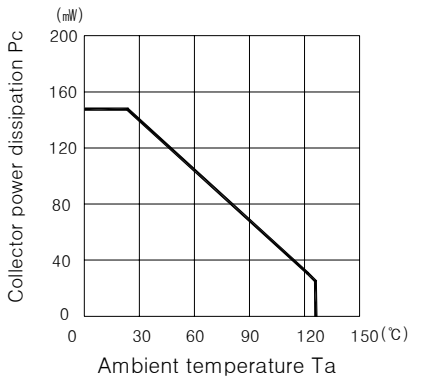
■ Relstive sensitivity Vs Wavelength



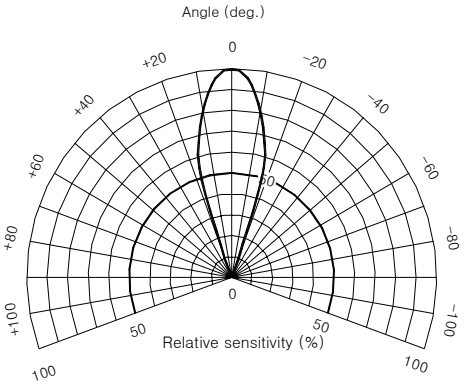
■ Switching time Vs Load resistance



■ Collector power dissipation Vs Ambient temperature



■ Radient Pattern



■ Dimensions (mm)