

The **OHT10CE** is a high-sensitivity NPN silicon phototransistor mounted in durable, hermetically sealed T0-18 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}	$V_{CE0}=10V$		1	200	nA
Light current		I_L	$V_{CE}=10v, 200Lux$	1.5	6.0	16	mA
C-E saturation voltage		$V_{ce(sat)}$	$I_c=5mA, 2000Lux$		0.2	0.4	V
Switching speeds	Rise time	t_r	$V_{cc}=10v, I_c=5mA$		8.0		usec.
	Fall time	t_f	$R_L=100\Omega$		10		usec.
Spectral sensitivity		λ		500~1,050			nm
Peak wavelength		λ_p			880		nm
Half angle		$\Delta \theta$			± 8		deg.

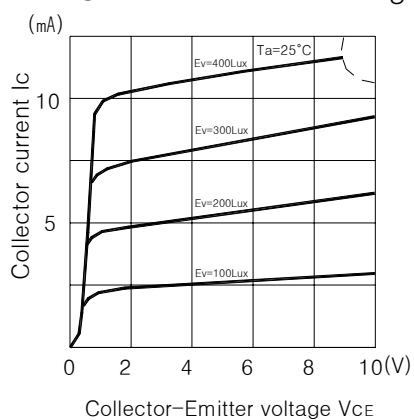
MAXIMUM RATINGS

(Ta=25℃)

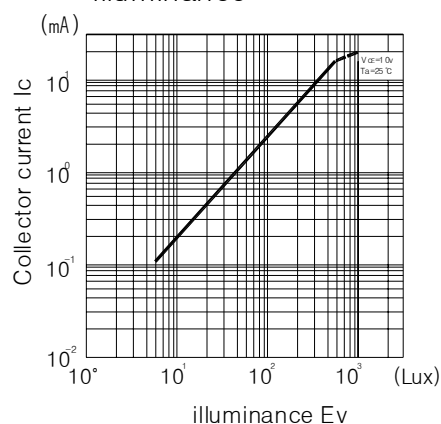
Item	Symbol	Rating	Unit
C-E voltage	V_{CE0}	40	V
E-C voltage	V_{ECO}	4	V
Collector current	I_c	50	mA
Collector power dissipation	P_D	150	mW
Operating temp.	$T_{opr.}$	-30~+125	℃
Storage temp.	$T_{stg.}$	-50~+150	℃
Soldering temp. ⁽¹⁾	$T_{sol.}$	260	℃

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

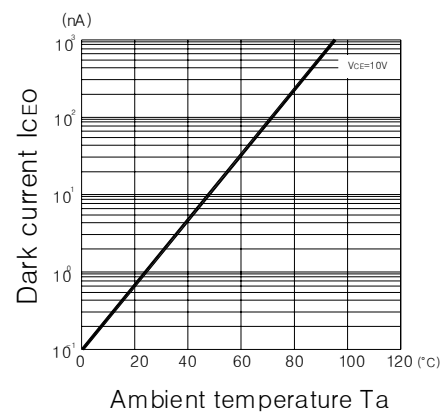
■ Collector current I_c Vs
Collector-Emitter voltage



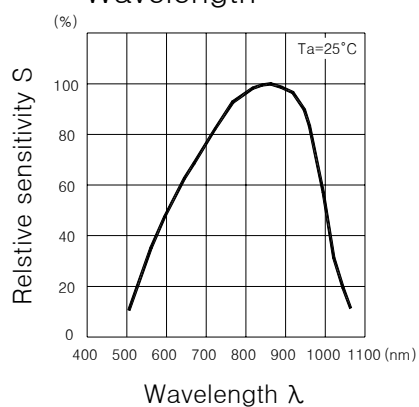
■ Collector current I_c Vs
illuminance



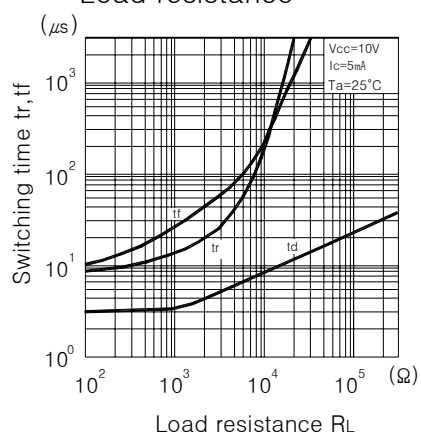
■ Dark current I_{cEO} Vs
Ambient temperature



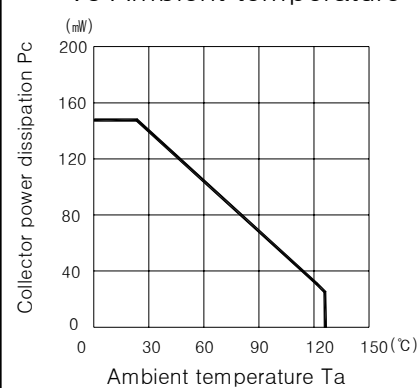
■ Relative sensitivity S Vs
Wavelength



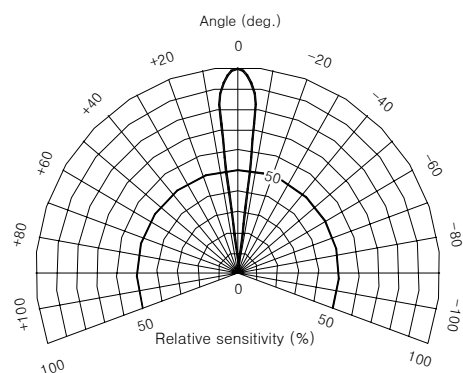
■ Switching time t_r, t_f Vs
Load resistance



■ Collector power dissipation P_c Vs
Ambient temperature



■ Radiant Pattern



■ Dimensions (mm)

