OHTG10MA

Photo transistors

The OHTG10MA is a high-sensitivity NPN silicon phototransistor mounted in TO-18 type header with clear epoxy encapsulation. The phototransistors have a wide angular response and relatively low cost compared to TO-18 can type devices.

FEATURES

- Wide angnlar response
- Relatively low-cost against metal can package
- Three leads(Collector, Emitter, Base)

APPLICATIONS

- Optical Switches
- Camera strobscopes
- infrared sensors

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	0.5	2.0	5.0	mA
C-E saturation voltage		V_{ce}(sat)	Ic=2mA,2000Lux		0.2	0.4	V
Switching speeds	Rise time	tr	Vcc=10v,Ic=5mA		8		usec.
	Fall time	tf	RL=100Ω		10		usec.
Spectral sensitivity		λ		500~1,050			nm
Peak wavelength		λp			880		nm
Half angle		Δθ			±70		deg.

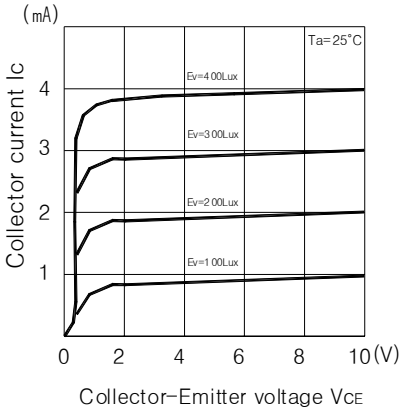
MAXIMUM RATINGS

(Ta=25℃)

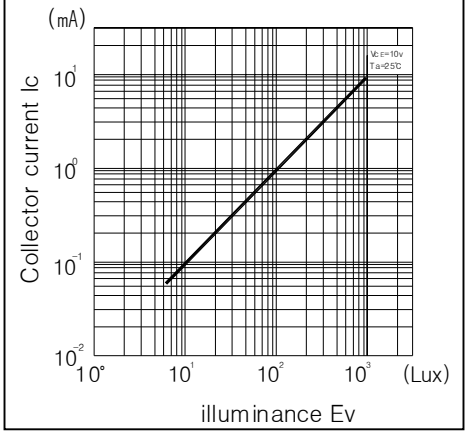
Item	Symbol	Rating	Unit
C-E voltage	V_{CEO}	40	V
E-C voltage	V_{ECO}	4	V
Collector current	Ic	30	mA
Power dissipation	P_D	100	mW
Operating temp.	Topr.	-25～+90	℃
Storage temp.	Tstg.	-30～+100	℃
Soldering temp.(1)	Tsol.	260	℃

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

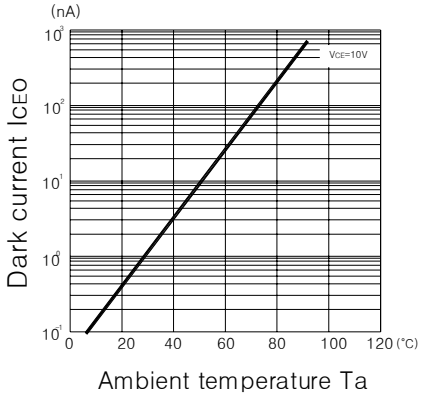
■ Collector current Vs Collector-Emitter voltage



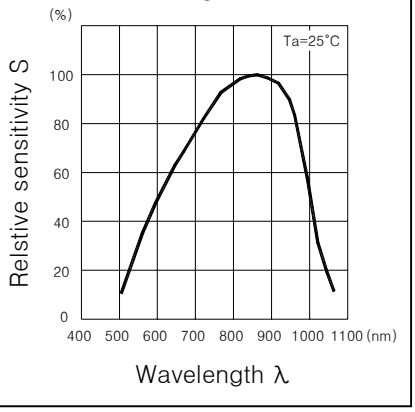
■ Collector current Vs Illuminance



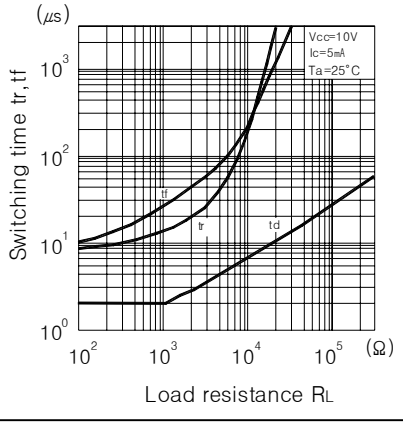
■ Dark current Vs Ambient temperature



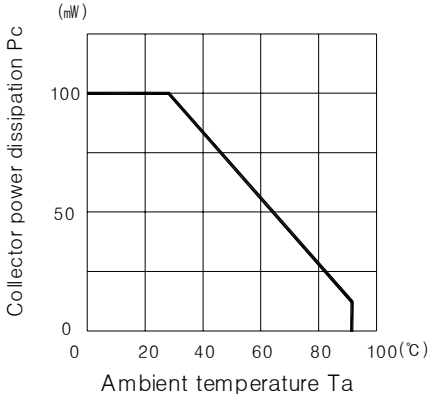
■ Relstive sensitivity Vs Wavelength



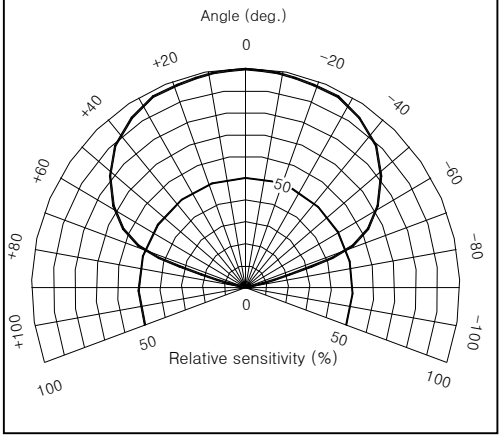
■ Switching time Vs Load resistance



■ Collector power dissipation Vs Ambient temperature



■ Radient Pattern



■ Dimensions (mm)