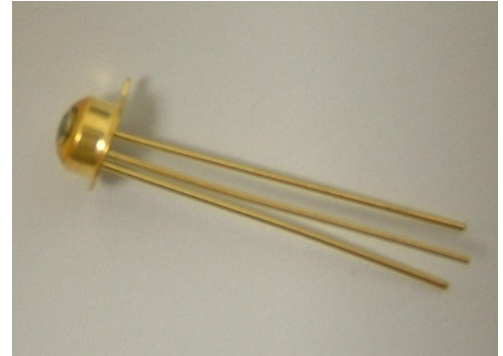


General Description

The OST-1MLB is high sensitivity NPN silicon phototransistors 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 angular response
- Low profile package
- Low cost
- Meet RoHS

Applications

- Optical switches
- Camera stroboscopes
- Infrared sensors

MAXIMUM RATINGS

(Ta=25°C)

Item	Symbol	Rating	Unit
C-E voltage	V _{CEO}	40	V
E-C voltage	V _{ECO}	4	V
Collector current	I _C	30	mA
Collector power dissipation	P _C	100	mW
Operating temp.	T _{opr}	-25 ~ +90	°C
Storage temp.	T _{stg}	-30 ~ +100	°C
Soldering temp. *1	T _{sol}	260	°C

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

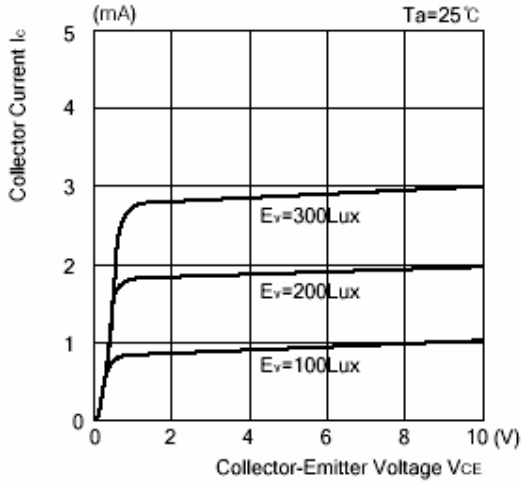
ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25°C)

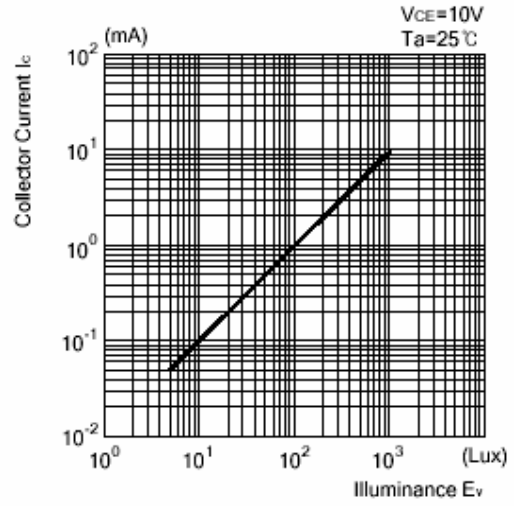
Item	Symbol	Condition	Min	Typ	Max	Unit
Collector dark current	I _{CEO}	V _{CEO} =10V		1	200	nA
Light current	I _L	V _{CE} =10V, 200Lux *2	0.5	2.0	5.0	mA
C-E saturation voltage	V _{CE(sat)}	I _C =2mA, 2000Lux *2		0.2	0.4	V
Switching speeds	Rise time	V _{CC} =10V, I _C =5mA, R _L =100Ω		8		usec
	Fall time			10		usec
Spectral sensitivity	λ		350 ~ 1050			nm
Peak wavelength	λ _p			880		nm
Half angle	Δθ			±70		deg.

* 2 Illumination is applied by a tungsten lamp of 2856K

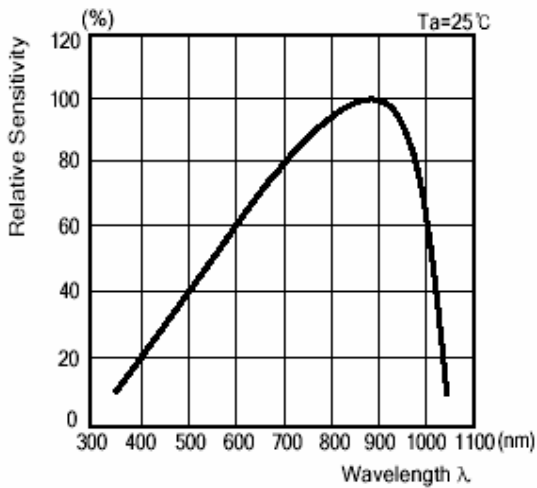
● Collector Current / Collector-Emitter Voltage I_c/V_{CE}



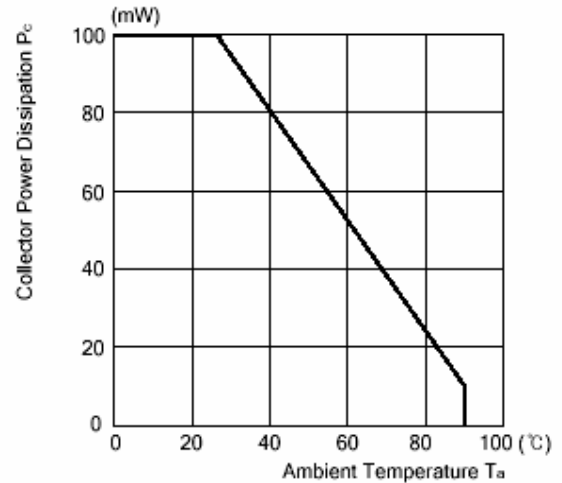
● Collector Current / Illuminance I_c/E_v



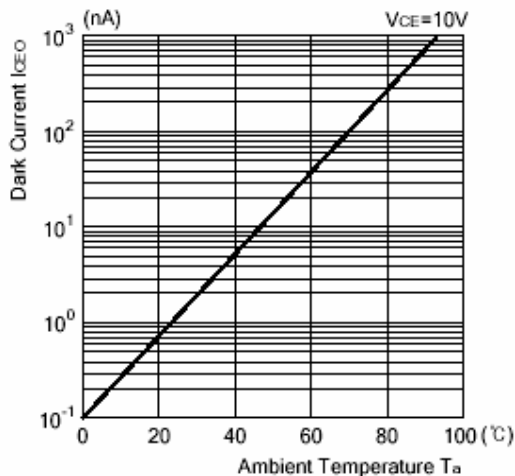
● Spectral Sensitivity



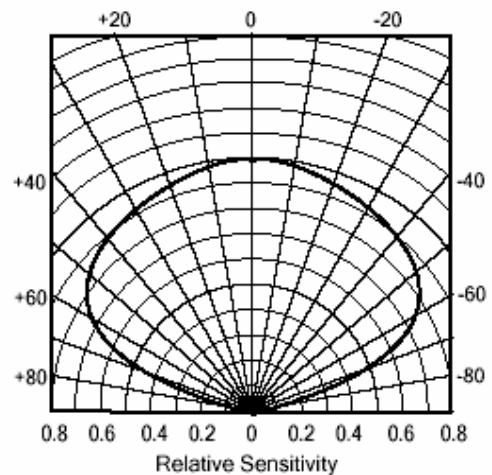
● Collector Power Dissipation / Ambient Temp. P_c/T_a



● Dark Current / Ambient Temperature I_{CE0}/T_a



● Directive Characteristics



DIMENSIONS

(Unit: mm)

