

OST-1MLB

Phototransistors

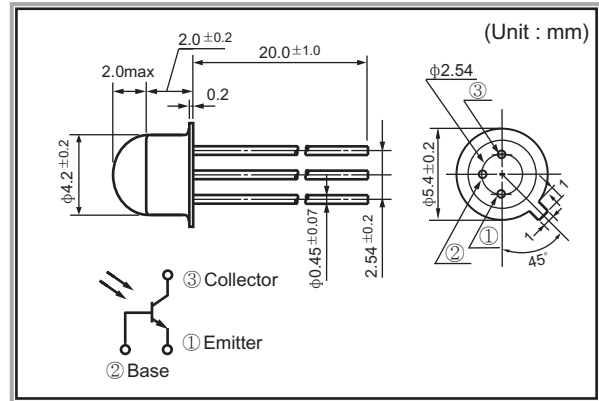
The OST-1MLB is high-sensitivity NPN silicon phototransistors mounted in TO-18 type header with clear epoxy encapsulation. The phototransistors have a wide angular response and relatively low-cost compared to TO-18 can type devices.

FEATURES

- Wide angular response
- Low profile package
- Low cost

APPLICATIONS

- Optical switches
- Camera stroboscopes
- Infrared sensors



MAXIMUM RATINGS

($T_a = 25^\circ\text{C}$)

ITEM	SYMBOL	RATING	UNIT
Collector-Emitter Voltage	V_{CEO}	40	V
Emitter-Collector Voltage	V_{ECO}	4	V
Collector Current	I_C	30	mA
Collector Power Dissipation	P_C	100	mW
Operating Temperature	T_{opr}	-25 ~ +90	$^\circ\text{C}$
Storage Temperature	T_{stg}	-30 ~ +100	$^\circ\text{C}$
Soldering Temperature *1	T_{sol}	260	$^\circ\text{C}$

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

ELECTRO-OPTICAL CHARACTERISTICS

($T_a = 25^\circ\text{C}$)

ITEM	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNIT
Collector Dark Current	I_{CEO}	$V_{CEO}=10\text{V}$		1	200	nA
Light Current	I_L	$V_{CE}=10\text{V}, 200\text{Lux}^*2$	0.5	2.0	5.0	mA
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=2\text{mA}, 2000\text{Lux}^*2$		0.2	0.4	V
Switching Speed	Rise Time	$V_{CC}=10\text{V}, I_C=5\text{mA}$ $R_L=100\Omega$		8		μs
	Fall Time			10		μs
Spectral Sensitivity	λ		350 ~ 1,050			nm
Peak Wavelength	λ_p		880			nm
Half Angle	$\Delta\theta$			± 70		deg.

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

OSCAR