

OST-1KLAR2

Phototransistors

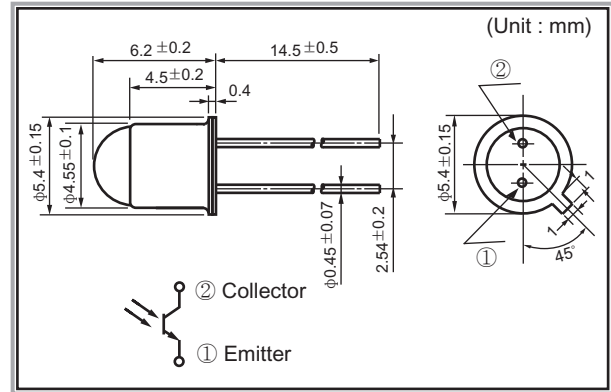
The OST-1KLAR2 is high-sensitivity NPN silicon phototransistors mounted in durable, hermetically sealed TO-18 metal can which provide years of reliable performance, even under demanding conditions such as use outdoors. With daylight filter the phototransistor is sensitive only infrared rays.

FEATURES

- Narrow angular response
- Durable
- High reliability in demanding environments
- Blue enhanced

APPLICATIONS

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



MAXIMUM RATINGS

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

ITEM	SYMBOL	RATING	UNIT
Collector-Emitter Voltage	V_{CE0}	40	V
Emitter-Collector Voltage	V_{ECO}	4	V
Collector Current	I_C	50	mA
Collector Power Dissipation	P_C	150	mW
Operating Temperature	T_{opr}	-30 ~ +100	$^\circ\text{C}$
Storage Temperature	T_{stg}	-50 ~ +150	$^\circ\text{C}$
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_{CE0}	$V_{CE0}=10V$		1	200	nA
Light Current	I_L	$V_{CE}=10V, 200\text{Lux}^*2$	7.0	8.0	13	mA
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=5mA, 2000\text{Lux}^*2$		0.2	0.4	V
Switching Speed	Rise Time	$V_{CC}=10V, I_C=5mA$ $R_L=100\Omega$		8		μs
	Fall Time			10		μs
Spectral Sensitivity	λ		720 ~ 1,050			nm
Peak Wavelength	λ_p		940			nm
Half Angle	$\Delta\theta$			±8		deg.

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

OSCAR