

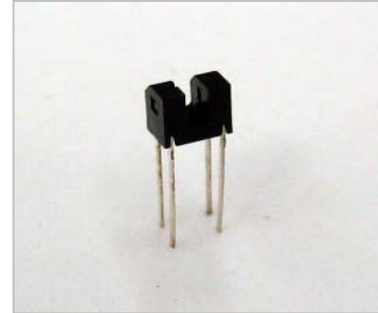
Mini Size Photo Interrupter KIT1002A

Description

The Photointerrupter high-performance Standard type KIT1002A combines a high-output GaAs IRED with a high sensitivity Phototransistor.

Features

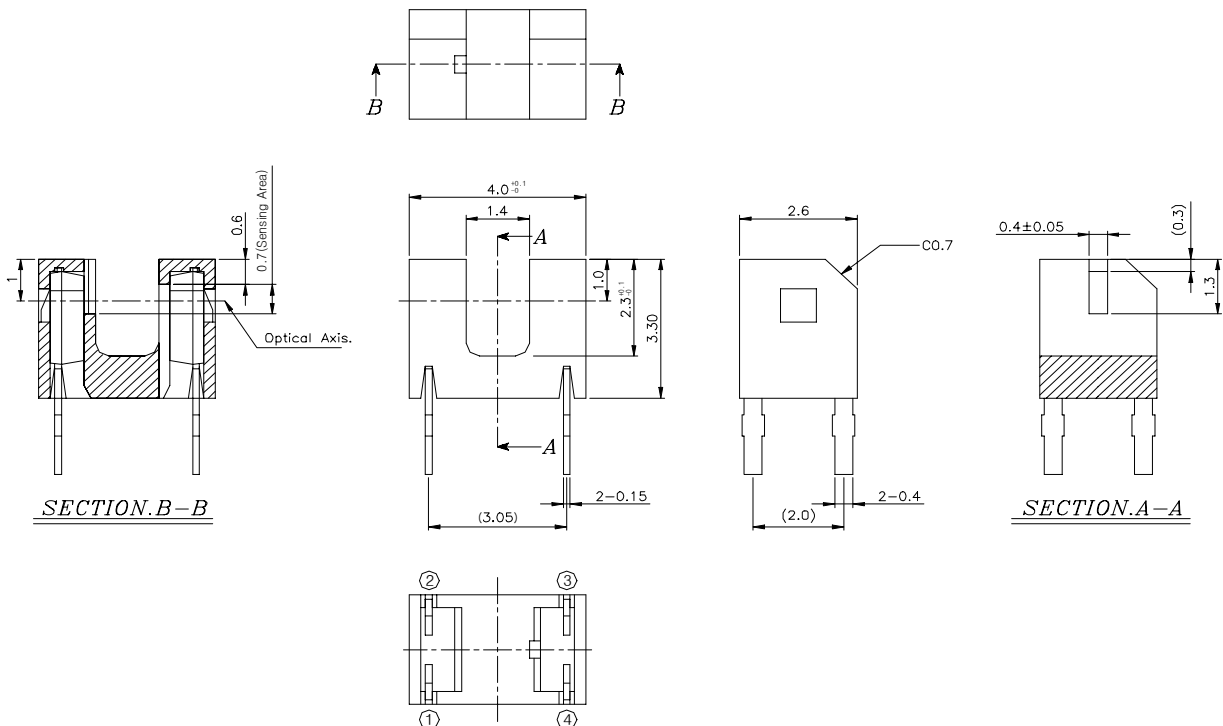
- PWB direct mount type
- 1.4mm gap
- Compact
- RoHS Compliance



Application

- Digital Cameras
- Camcorder
- Floppy disk drives
- Encoders

Outline Dimensions



MAXIMUM RATINGS

[Ta= 25 °C]

Parameter	Symbol	Conditions	Min.	Max.	Unit
Power dissipation	P_D	-	-	75	mW
Forward current	I_F	-	-	50	mA
Reverse voltage	V_R	-	-	5	V
Pulse forward current	I_{FP}	$tw \leq 100\mu s$ $T=10ms$	-	0.5	A
Collector dissipation	P_C	-	-	75	mW
Collector current	I_C	-	-	20	mA
C-E voltage	V_{CEO}	-	-	30	V
Operating temperature	$T_{opr.}$	-	-25	85	°C

ELECTRO- OPTICAL CHARACTERISTICS

[$V_{CC}=3V$, $T_a= 25\text{ }^\circ\text{C}$]

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit	
LED	Forward voltage	V_F	$I_F=20mA$	-	1.2	1.4	V
	Reverse current	I_R	$V_R=5V$	-	-	10.0	μA
	Peak wavelength	λ_p	$I_F=20mA$	-	940.0	-	nm
Detector	Dark current	I_{CEO}	$V_{CE}=10V$, 0lx	-	1	100	mA
	Peak Wavelength	λ_p	-	-	880	-	nm
Transmission	Light current (Collector Current)	I_C	$I_F=10mA$, $V_{CE}=5V$ Non shading	0.3	-	-	mA
	Leakage current	I_{CEOD}	$I_F=10mA$, $V_{CE}=5V$ Shading	-	0.5	10	μA
	C-E Saturation voltage	$V_{CE(sat)}$	$I_F=10mA$, $I_C=0.3mA$	-	0.15	0.4	V
Time	Rise time	t_r	$V_{CC}=5V$, $I_C=1mA$ $R_L=100\Omega$	-	10	-	μs
	Fall time	t_f		-	10	-	μs