

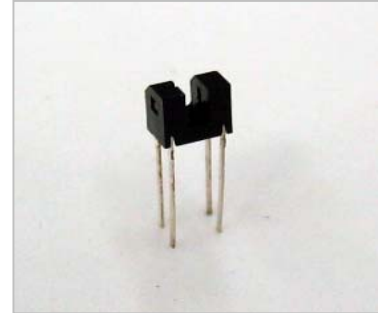
**Mini Size Photo Interrupter KIT1002A**

**Description**

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

**Features**

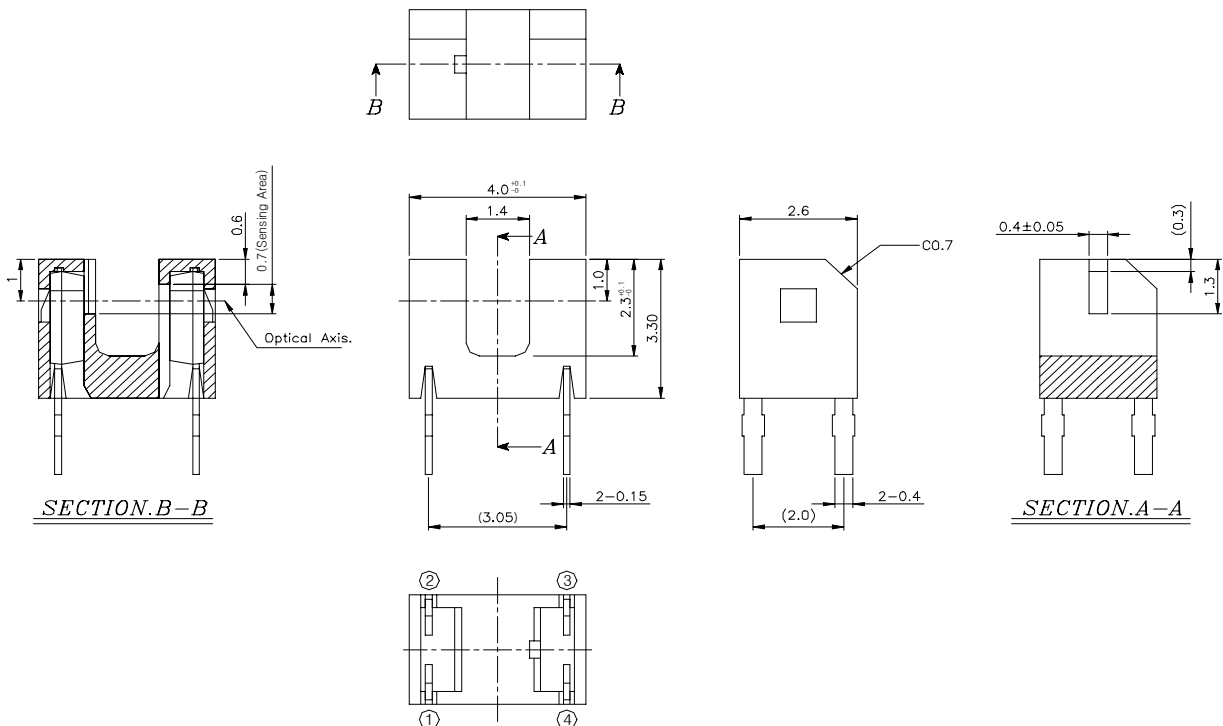
- PWB direct mount type
- 1.4mm gap
- Compact
- RoHS Compliance



**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	Topr.	-	-25	85	°C

## ELECTRO- OPTICAL CHARACTERISTICS

[ Vcc=3V, Ta= 25 °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	$\mu A$
	Peak wavelength	$\lambda_p$	$I_F=20mA$	-	940.0	-	nm
Detector	Dark current	$I_{CEO}$	$V_{CE}=10V, 0lx$	-	1	100	mA
	Peak Wavelength	$\lambda_p$	-	-	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	$\mu A$
	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	-	$\mu s$
	Fall time	$t_f$		-	10	-	$\mu s$