

Photointerrupter, Small type



Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Forward current	I_f	50	mA
Reverse voltage	V_R	5	V
Power dissipation	P_D	80	mW
Collector-emitter voltage	V_{CE0}	30	V
Emitter-collector voltage	V_{EC0}	4.5	V
Collector current	I_C	30	mA
Collector power dissipation	P_C	80	mW
Operating temperature	T_{opr}	-25 to +85	°C
Storage temperature	T_{stg}	-40 to +100	°C

Applications

- Optical control equipment
- Cameras
- Floppy disk drives

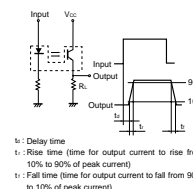
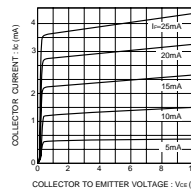
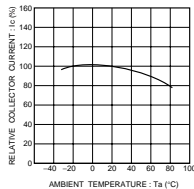
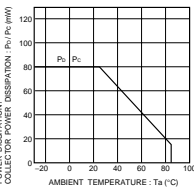
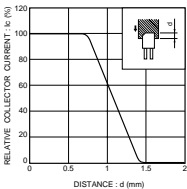
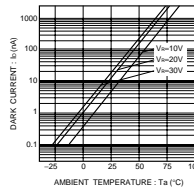
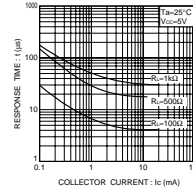
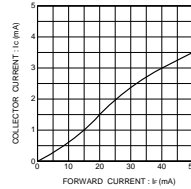
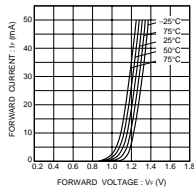
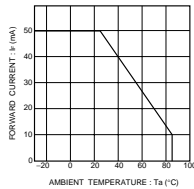
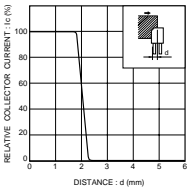
Features

- Ultra-small.
- Minimal influence from stray light.
- Low collector-emitter saturation voltage.

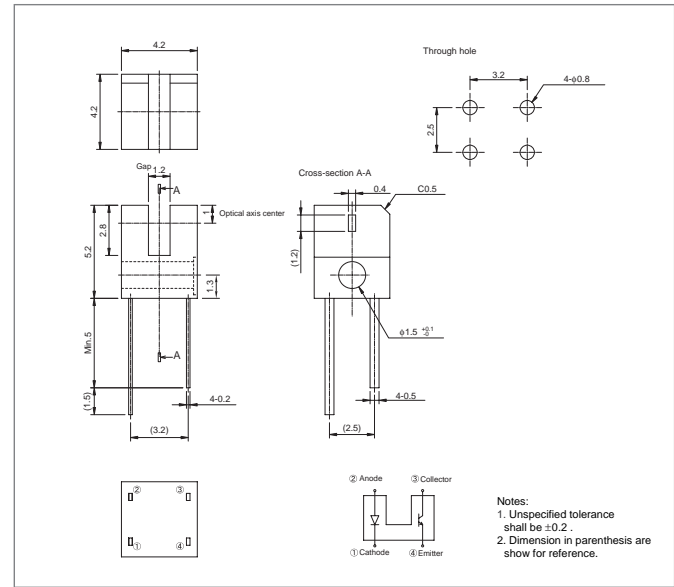
Electrical and optical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_f	-	1.3	1.6	V	$I_f=50\text{mA}$
Reverse current	I_R	-	-	10	μA	$V_R=5\text{V}$
Dark current	I_{CE0}	-	-	0.5	μA	$V_{CE}=10\text{V}$
Peak sensitivity wavelength	λ_p	-	800	-	nm	-
Collector current	I_{C1}	0.7	-	-	mA	$V_{CE}=5\text{V}, I_f=20\text{mA}$
	I_{C2}	0.2	-	-	mA	$V_{CE}=5\text{V}, I_f=5\text{mA}$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	0.3	V	$I_f=20\text{mA}, I_C=0.3\text{mA}$
Response time	t_r+t_f	-	10	-	μs	$V_{CC}=5\text{V}, I_f=20\text{mA}, R_L=100\Omega$
Cut-off frequency	f_c	-	1	-	MHz	$I_f=50\text{mA}$
Peak light emitting wavelength	λ_p	-	950	-	nm	+ Non-coherent infrared light emitting diode used.
Response time	t_r+t_f	-	10	-	μs	$V_{CC}=5\text{V}, I_C=1\text{mA}, R_L=100\Omega$ + This product is not designed to be protected against electromagnetic wave.
Maximum sensitivity wavelength	λ_p	-	800	-	nm	-

Electrical and optical characteristics curves



External dimensions (Unit : mm)



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