



Photo-Interrupter

(Mode: SY-508 SY-509 SY-510)

Features

- High reliability
- High speed
- Capable of a wide application
- Easy to be mounted on PCB
- 0.5mm aperture
- Low cost

Application

- Tape-end Sensor
- Timing Sensor
- Edge Sensor
- Counter Sensor

Absolute Maximum Ratings (Ta = 25°C)

	SYMBOL	RATINGS	UNIT
INPUT			
Forward DC current	I_f	60	mA
Pulse forward current	I_{fp}	—	A
Reverse voltage	V_r	6	V
OUTPUT			
Collector emitter voltage	BV_{cco}	30	V
Emitter collector voltage	BV_{cco}	6	V
Power dissipation	P_c	100	mW
COUPLED			
Storage temperature	T_{str}	-25 ~ +100	°C
Operating temperature	T_{opr}	-20 ~ +85	°C
Lead Soldering temp. (5 sec)		250	°C

Electro-Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	MIN.	TYP.	MAX.		CONDITIONS
INPUT						
Forward voltage	V_f	—	1.2	1.5	V	$I_f=30mA$
Reverse leakage current	I_r	—	—	10	μA	$V_r=4V$
OUTPUT						
Dark current	I_d	—	—	100	nA	$V_{CE}=10V$ $I_f=0$
Junction capacitance	C_t	—	—	—		
COUPLED						
Output current	I_c	0.5	—	—	mA	$I_f=20mA$ $V_{CE}=5V$
Rise time	T_r	—	5	—	μS	$I_c=2mA$ $V_{CE}=5V$
Fall time	T_f	—	5	—	μS	$RL=100ohm$

Package Dimension: (Unit: mm)

