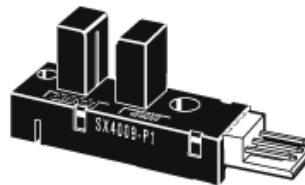


## Transmissive SX3 / SX4 series

EE-SX4009-P1 Photomicrosensor (Transmissive)

- Screw-mounting model.
- High resolution with a 0.5-mm-wide sensing aperture.
- With a 5-mm-wide groove.
- Photo IC output signals directly connect with C-MOS and TTL.
- Connects to Tyco Electronics AMP's EI-series connectors.

RoHS



### Absolute Maximum Ratings (Ta = 25°C)

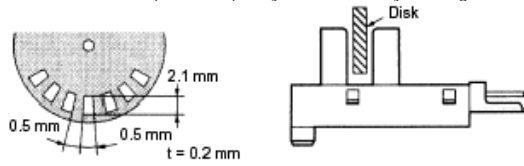
Item	Symbol	Rated value	
Power supply voltage	VCC	10 V	
Output voltage	VOUT	28 V	
Output current	IOUT	16 mA	
Permissible output dissipation	POUT	250 mW (see note)	
Ambient temperature	Operating	Topr	-25°C to 75°C
	Storage	Tstg	-40°C to 85°C
Soldering temperature	Tsol	---	

Note: Refer to the temperature rating chart if the ambient temperature exceeds 25°C.

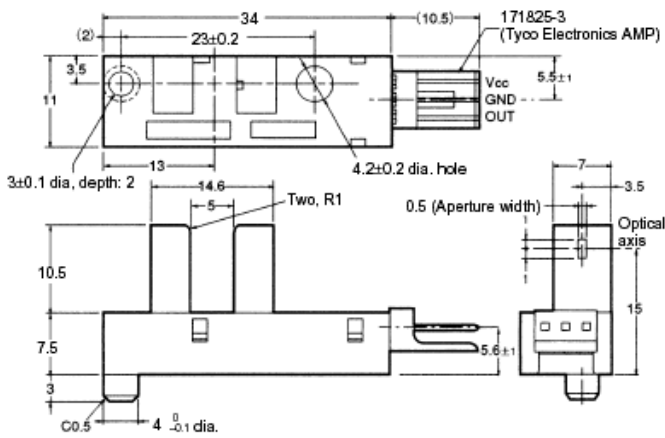
### Electrical and Optical Characteristics (Ta = 25°C, VCC = 5 V ±10%)

Item	Symbol	Value	Condition
Current consumption	Icc	30 mA max.	With and without incident
Low-level output voltage	VOL	0.3 V max.	IOUT = 16 mA with incident
High-level output voltage	VOH	(VCC × 0.9) V min.	VOUT = VCC without incident, RL = 47 kΩ
Response frequency	f	3 kHz min.	VOUT = VCC, RL = 47 kΩ(see note)

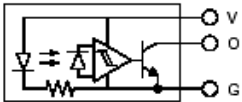
Note : The value of the response frequency is measured by rotating the disk as shown below.



Note: All units are in millimeters unless otherwise indicated.



**Internal Circuit**



Terminal No.	Name
V	Power supply (Vcc)
O	Output (OUT)
G	Ground (GND)

Unless otherwise specified, the tolerances are as shown below.

Dimensions	Tolerance
4 mm max.	±0.2
4 < mm ≤ 16	±0.3
16 < mm ≤ 63	±0.5