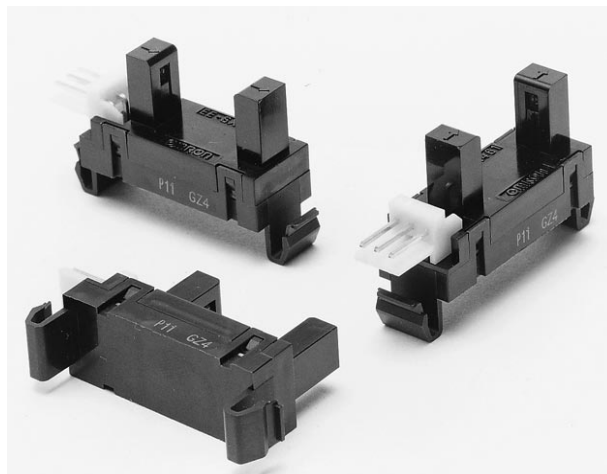
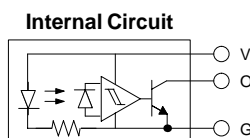
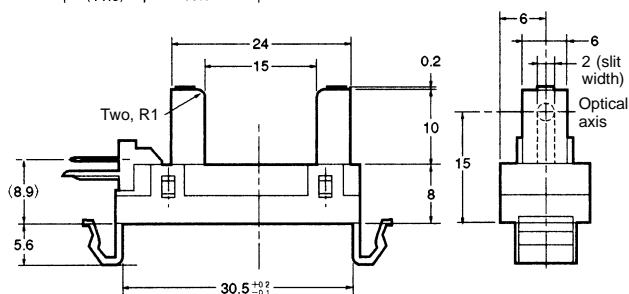
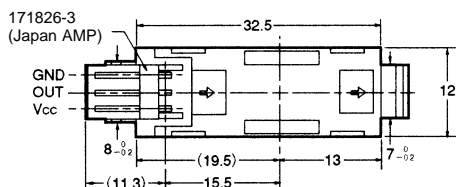


#### Transmissive

- Photo-IC output.
- Snap-in-mounting model.
- Mounts to 0.8- to 1.6-mm-thick panels.
- High resolution with a 0.5-mm-wide sensing aperture.
- With a 15-mm-wide slot.
- Photo IC output signals directly connect to C-MOS and TTL.
- Connects to Japan AMP's EI-series connectors.



#### Dimensions



Terminal No.	Name
V	Supply voltage (Vcc)
O	Output (OUT)
G	Ground (GND)

Unless otherwise specified, the tolerances are as shown below.

Dimensions	Tolerance
3 mm max.	±0.3
3 < mm ≤ 6	±0.375
6 < mm ≤ 10	±0.45
10 < mm ≤ 18	±0.55
18 < mm ≤ 30	±0.65

Recommended Connectors:  
 Japan AMP 171822-3 (crimp-type connector)  
 172142-3 (crimp-type connector)  
 OMRON EE-1005 (with harness)

#### Specifications

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

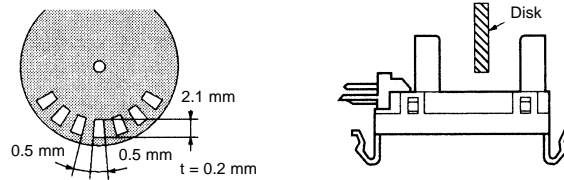
Item	Symbol	Rated value
Supply voltage	V <sub>CC</sub>	7 V
Output voltage	V <sub>OUT</sub>	28 V
Output current	I <sub>OUT</sub>	16 mA
Permissible output dissipation	P <sub>OUT</sub>	250 mW (see note)
Operating temperature	T <sub>opr</sub>	-20°C to 75°C
Storage temperature	T <sub>stg</sub>	-40°C to 85°C
Soldering temperature	T <sub>sol</sub>	---

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%)

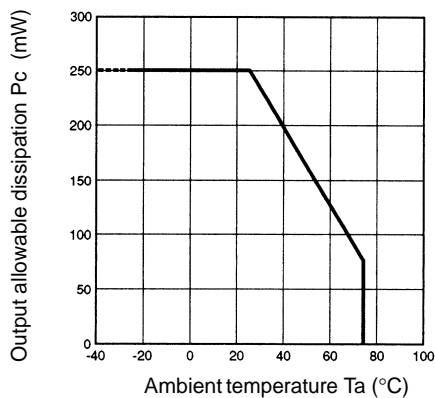
Item	Symbol	Value	Condition
Current consumption	I <sub>CC</sub>	35 mA max.	With and without incident
Low-level output voltage	V <sub>OL</sub>	0.3 V max.	I <sub>OUT</sub> = 16 mA with incident
High-level output voltage	V <sub>OH</sub>	(V <sub>CC</sub> × 0.9) V min.	V <sub>OUT</sub> = V <sub>CC</sub> without incident, R <sub>L</sub> = 47 kΩ
Response frequency	f	3 kHz min.	V <sub>OUT</sub> = V <sub>CC</sub> , R <sub>L</sub> = 47 kΩ (see note)

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

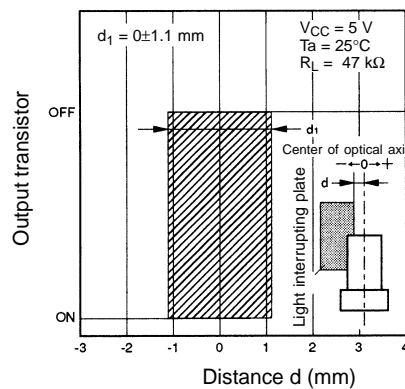


## Engineering Data

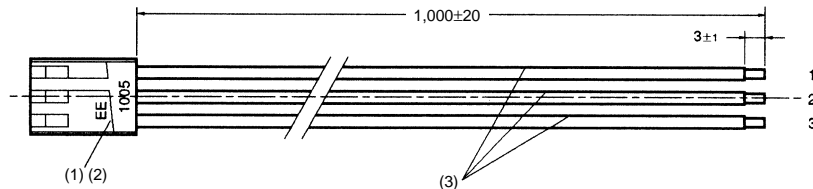
### Output Allowable Dissipation vs. Ambient Temperature Characteristics



### Sensing Position Characteristics (Typical)



### EE-1005 Connector

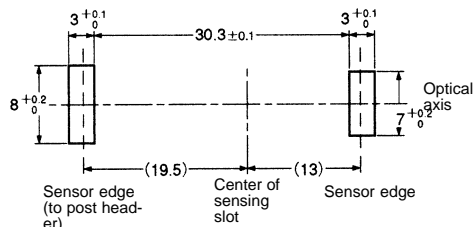


No.	Name	Model	Quantity	Maker
1	Receptacle housing	171822-3	1	Japan AMP
2	Receptacle contact	170262-1	3	Japan AMP
3	Lead wire	UL1007 AWG24	3	---

### Wiring

Connector circuit no.	Lead wire color
1	Red
2	Orange
3	Yellow

## ■ Recommended Mounting Hole Dimensions and Mounting and Dismounting Method



The Opto-Switch can be mounted to 0.8- to 1.6-mm-thick panels.

Refer to the above mounting hole dimensions and open the mounting holes in the panel to which the Opto-Switch will be mounted.

Insert into the holes the Opto-Switch's mounting portions with a force of three to five kilograms but do not press in the Opto-Switch at one time. The Opto-Switch can be easily mounted by inserting the mounting portions halfway and then slowly pressing the Opto-Switch onto the panel.

Dismounting is achieved by either hand (below panel) or by screwdriver (above panel).