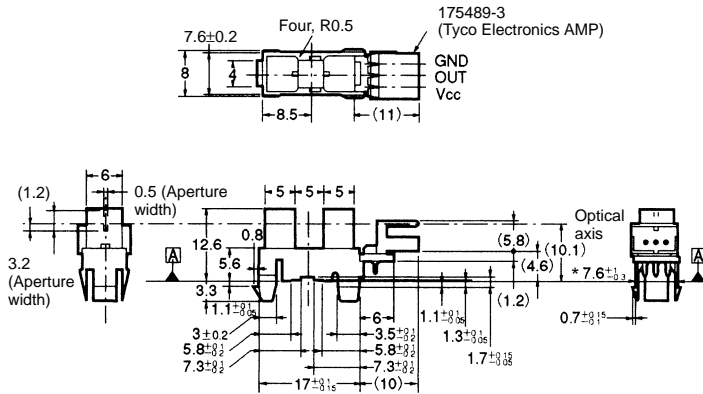


EE-SX4235A-P2

Photomicrosensor (Transmissive)

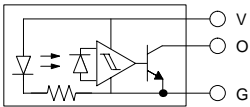
■ Dimensions

Note: All units are in millimeters unless otherwise indicated.



Note: The asterisked dimension is specified by datum A only.

Internal Circuit



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 |

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

Recommended Mating Connectors:
 Tyco Electronics AMP 179228-3 (crimp-type connector)
 175778-3 (crimp-type connector)
 173977-3 (press-fit connector)

■ Features

- Snap-in mounting model.
- Mounts to 1.0-, 1.2- and 1.6-mm-thick panels.
- High resolution with a 0.5-mm-wide sensing aperture.
- With a 5-mm-wide slot.
- Photo IC output signals directly connect with C-MOS and TTL.
- Connects to Tyco Electronics AMP's CT-series connectors.

■ Absolute Maximum Ratings (Ta = 25°C)

| Item | Symbol | Rated value | |
|--------------------------------|------------------|-------------------|---------------|
| Power supply voltage | V _{CC} | 7 V | |
| Output voltage | V _{OUT} | 28 V | |
| Output current | I _{OUT} | 16 mA | |
| Permissible output dissipation | P _{OUT} | 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, V_{CC} = 5 V ±10%)

| Item | Symbol | Value | Condition |
|---------------------------|-----------------|--------------------------------|---|
| Current consumption | I _{CC} | 16.5 mA max. | With and without incident |
| Low-level output voltage | V _{OL} | 0.35 V max. | I _{OUT} = 16 mA with incident |
| High-level output voltage | V _{OH} | (V _{CC} × 0.9) V min. | V _{OUT} = V _{CC} without incident, R _L = 47 kΩ |
| Response frequency | f | 3 kHz min. | V _{OUT} = V _{CC} , R _L = 47 kΩ (see note) |

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

