

EE-SX4235A-P2

Photo IC Output Features Snap-in Mounting

- Unique snap-in mounting mechanism facilitates easy mounting with no screws or nuts
- Compatible with 1.0-mm, 1.2-mm, and 1.6-mm thick PCBs
- Photo IC receiver assures a high output of 16 mA at 28 VDC and a frequency response of 3 kHz
- Easy wiring with commercially available connector



Ordering Information

Appearance	Sensing method	Slot width	Slot depth	Output configuration	Weight	Applicable mating connector	Part number
	Transmissive	5 mm	7 mm	Light-ON	Approx. 1.3 g	AMP 175778-3 AMP 173977-3	EE-SX4235A-P2

Specifications

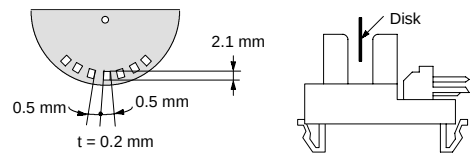
■ ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$)

Item		Symbol	Rated value
Supply voltage		V_{CC}	7 VDC
Output voltage		V_{OUT}	28 V
Output current		I_{OUT}	16 mA
Permissible output dissipation		P_{OUT}	250 mW
Ambient temperature	Operating	T_{opr}	-20°C to 85°C (-4°F to 185°F)
	Storage	T_{stg}	-40°C to 85°C (-40°F to 185°F)

CHARACTERISTICS (T_A = 25°C, V_{CC} = 5 V±10%)

Item	Symbol	Condition	Value
Low level output voltage	V _{OL}	0.35 V max.	I _{OUT} = 16 mA with incident light
High level output voltage	V _{OH}	(V _{CC} × 0.9) V min.	V _{OUT} = V _{CC} ; R _L = 47 kΩ (without incident light)
Current consumption	I _{CC}	30 mA max.	With or without incident light
Response frequency	f	3,000 P.P.S. min.	V _{OUT} = V _{CC} ; R _L = 47 kΩ

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



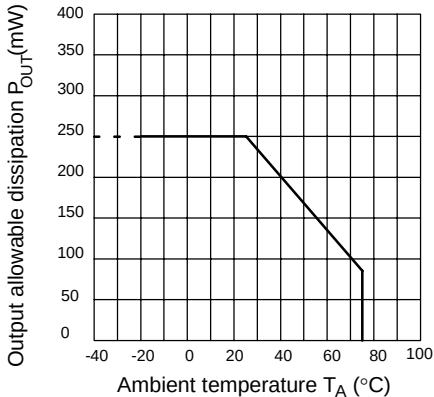
RECOMMENDED OPERATING CONDITIONS (WITHIN THE RATED TEMPERATURE RANGE)

Item	Symbol	Recommended value	Remarks
Supply voltage	V _{CC}	5 V±10%	Refer to Engineering Data (Temperature Characteristics) and keep the output voltage and current as low as possible in the recommended range.
Output voltage	V _{OUT}	4.5 to 28 V	
Output current	I _{OUT}	16 mA max.	

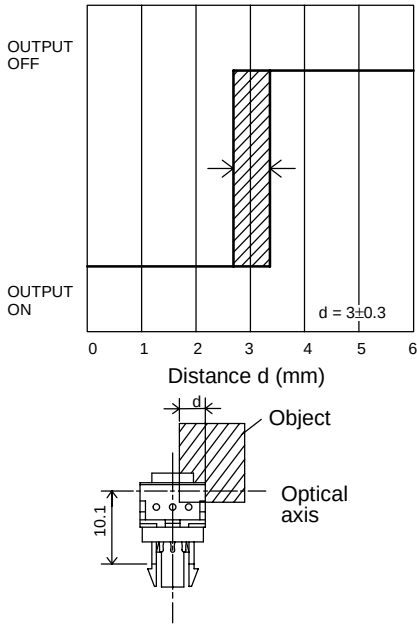
Engineering Data

Note: The operating conditions of the photomicrosensor must be within the absolute maximum rating ranges.

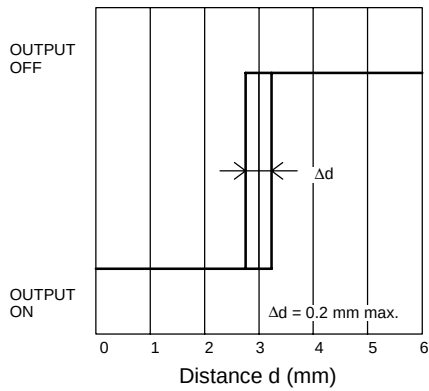
TEMPERATURE CHARACTERISTICS



SENSING POSITION CHARACTERISTICS



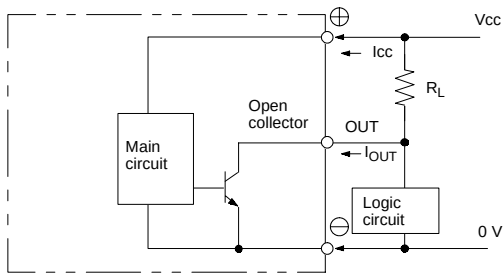
REPEATED SENSING POSITION CHARACTERISTICS



Operation

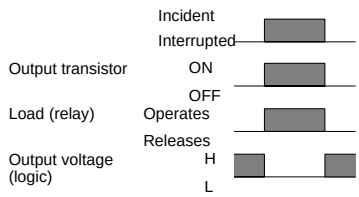
INTERNAL/EXTERNAL CIRCUIT DIAGRAM

Light-ON



TIMING CHART

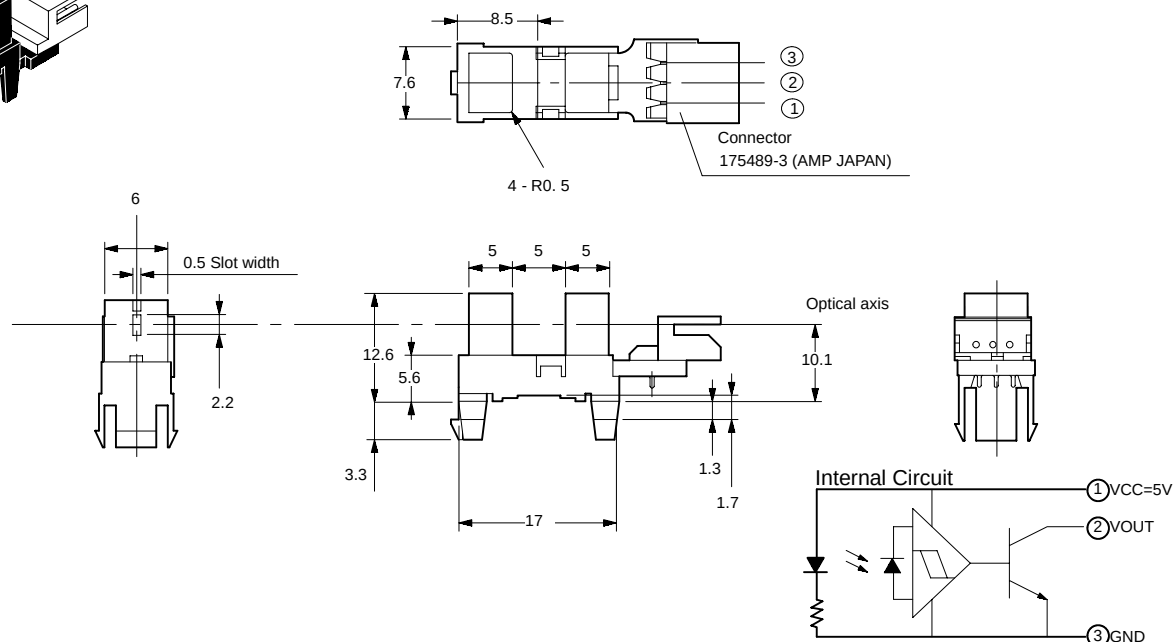
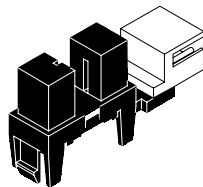
Light-ON



Dimensions

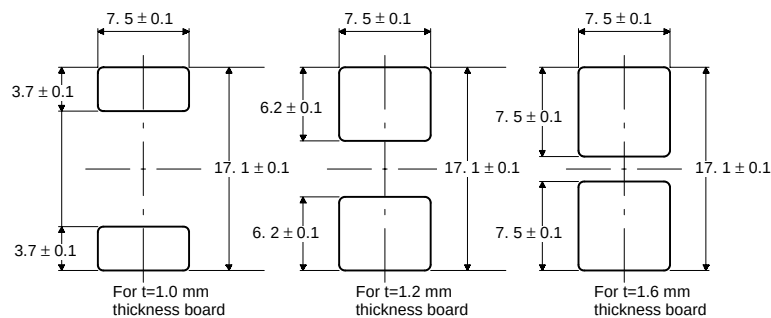
Unit: mm (inch)

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Recommended Mounting Holes

Note: Refer to the Technical Information section for snap-in mounting procedure.
Each corner must be R0.5 max.



Precautions

Refer to the Technical Information Section for general precautions.

NOTE: DIMENSIONS SHOWN ARE IN MILLIMETERS. To convert millimeters to inches divide by 25.4.

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