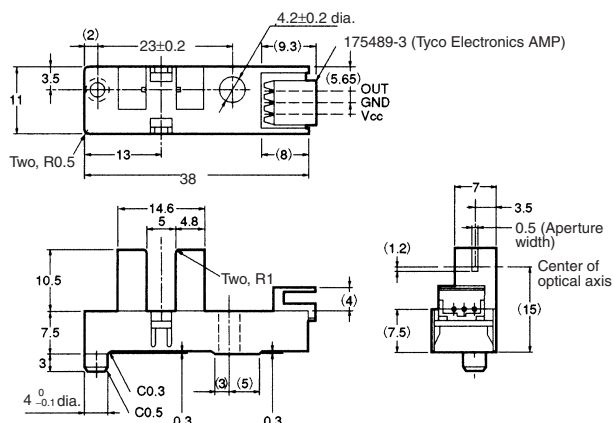


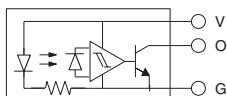
Photomicrosensor (Transmissive) EE-SX3019-P2/-SX4019-P2

■ Dimensions

Note: All units are in millimeters unless otherwise indicated.



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

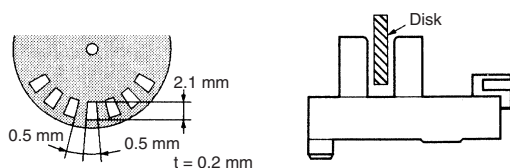
Recommended Mating Connectors:

Tyco Electronics AMP 179228-3 (crimp connector)
175778-3 (crimp connector)
173977-3 (press-fit connector)

■ Electrical and Optical Characteristics (Ta = 25°C, V_{CC} = 5 V ±10%)

Item	Symbol	Value	Condition
Current consumption	I _{CC}	20 mA max.	With and without incident
Low-level output voltage	V _{OL}	0.3 V max.	I _{OUT} = 16 mA Without incident (EE-SX3019-P2) With incident (EE-SX4019-P2)
High-level output voltage	V _{OH}	(V _{CC} × 0.9) V min.	V _{OUT} = V _{CC} With incident (EE-SX3019-P2) Without incident (EE-SX4019-P2), 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.



■ Features

- 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 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	–20°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.

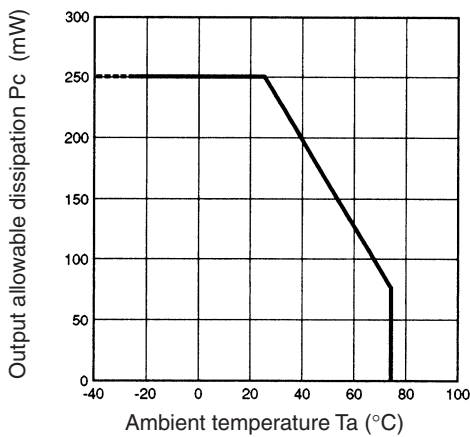
■ Ordering Information

Description	Model
Photomicrosensor (transmissive)	Dark ON
	Light ON
	EE-SX3019-P2
	EE-SX4019-P2

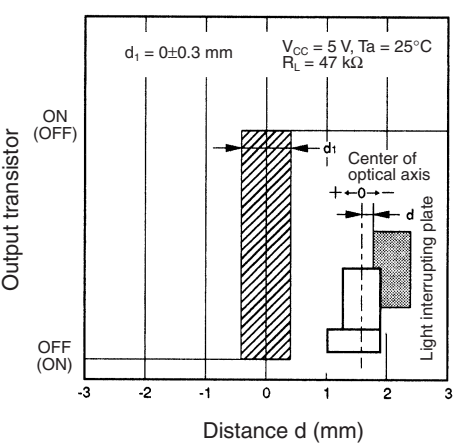
■ Engineering Data

Note: The values in the parentheses apply to the EE-SX4019-P2.

Output Allowable Dissipation vs. Ambient Temperature Characteristics



Sensing Position Characteristics (Typical)



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