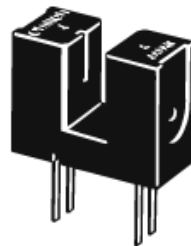


## Transmissive SX1 series

EE-SX1071 Photomicrosensor (Transmissive)

- General-purpose model with a 3.4-mm-wide slot.
- PCB mounting type.
- High resolution with a 0.5-mm-wide aperture.

RoHS



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

Item		Symbol	Rated value
Emitter	Forward current	IF	50mA (see note 1)
	Pulse forward current	IFP	1A (see note 2)
	Reverse voltage	VR	4V
Detector	Collector-Emitter voltage	VCEO	30V
	Emitter-Collector voltage	VECO	---
	Collector current	IC	20mA
	Collector dissipation	PC	100mW (see note 1)
Ambient temperature	Operating	Topr	-25°C to 85°C
	Storage	Tstg	-30°C to 100°C
Soldering temperature		Tsol	260°C (see note 3)

Note: 1. Refer to the temperature rating chart if the ambient temperature exceeds 25°C.  
 2. The pulse width is 10  $\mu$ s maximum with a frequency of 100 Hz.  
 3. Complete soldering within 10 seconds.

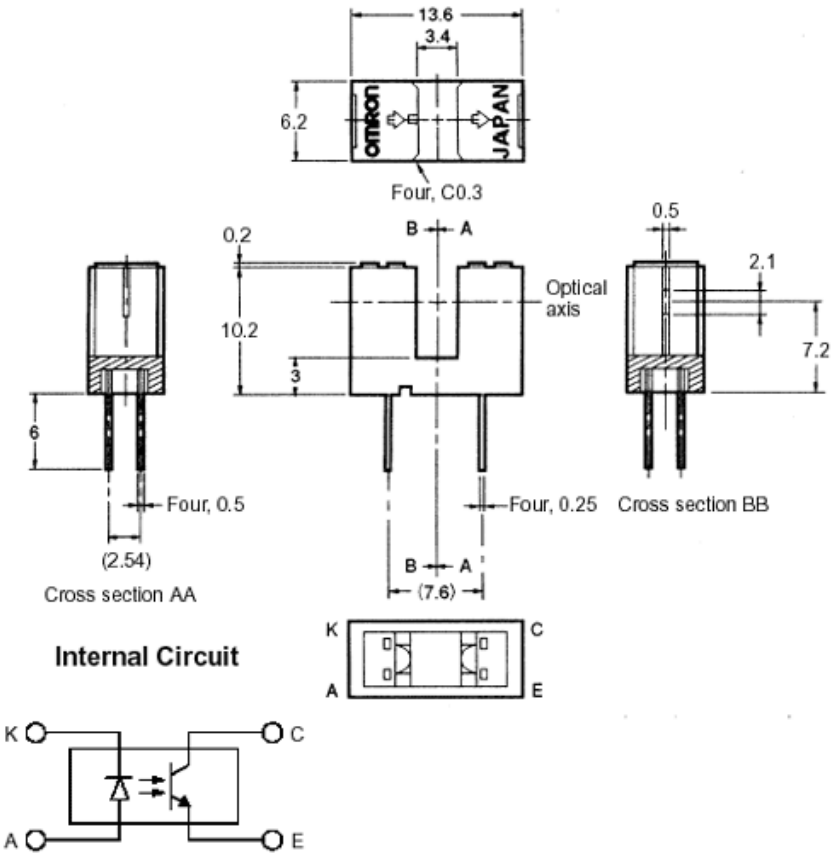
**Electrical and Optical Characteristics (Ta = 25°C)**

Item	Symbol	Value	Condition	
Emitter	Forward voltage	V <sub>F</sub>	1.2 V typ., 1.5 V max.	I <sub>F</sub> = 30mA
	Reverse current	I <sub>R</sub>	0.01μA typ., 10 μA max.	V <sub>R</sub> = 4V
	Peak emission wavelength	λ <sub>P</sub>	940 nm typ.	I <sub>F</sub> = 20mA
Detector	Light current	I <sub>L</sub>	0.5 mA min., 14 mA max.	I <sub>F</sub> = 20 mA, V <sub>CE</sub> = 10V
	Dark current	I <sub>D</sub>	2 nA typ., 200 nA max.	V <sub>CE</sub> = 10 V, 0ℓ ×
	Leakage current	I <sub>LEAK</sub>	---	---
	Collector-Emitter saturated voltage	V <sub>CE</sub> (sat)	0.1 V typ., 0.4 V max.	I <sub>F</sub> = 20 mA, I <sub>L</sub> = 0.1mA
	Peak spectral sensitivity wavelength	λ <sub>P</sub>	850 nm typ.	V <sub>CE</sub> = 10V
Rising time	t <sub>r</sub>	4 μs typ.	V <sub>CC</sub> = 5V, R <sub>L</sub> = 100Ω, I <sub>L</sub> = 5mA	
Falling time	t <sub>f</sub>	4 μs typ.	V <sub>CC</sub> = 5V, R <sub>L</sub> = 100Ω, I <sub>L</sub> = 5mA	

Terminal No.	Name
A	Anode
K	Cathode
C	Collector
E	Emitter

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



Note: All units are in millimeters unless otherwise indicated.