



NO:	PMS - 032	PRODUCT:	EE-Series (Partial) – Photomicrosensors
DATE:	August 2023	TYPE:	DISCONTINUATION – Streamline Product Offering

# **EE-Series (Partial) Photomicrosensors - DISCONTINUATION**

In an effort to streamline our product offering and focus on popular models of Omron's line of Photomicrosensors, OMRON will discontinue some of the EE-Series Photomicrosensors at the end of February 2024. There are no direct drop-in replacements. Omron suggests consideration of our EE-SY199 or EE-SY199-1 sensors as alternatives to the EE-SY1200 and EE-SY1200-1 sensors. (This requires re-evaluating the values of R<sub>F</sub> and R<sub>L</sub> used within existing circuits.) Please carefully read through this notification and note the differences. The following details will fully explain the discontinuation and suggested replacement considerations; should you have any additional questions, however, please communicate with the Sensor Product Manager, Roland Hiso.

## LAST ORDER DATE (Last Time Buy Date)

February 29, 2024

### **Product Discontinuation**

Model EE- SA105 Model EE-SY1200 Model EE-SY1200-1



Suggested Replacement

No suggested replacement Model EE-SY199 Model EE-SY199-1

#### **Differences from discontinued product:**

Suggested Replacement Model	Body Color	Dimen- sions	Wire connection	Mounting Dimensions	 Operation ratings	Operation methods
EE-SY199	**		**		 -	-

\*\* : Compatible

- \* : The change is a little/Almost compatible
- -- : Not compatible
- : No corresponding specification

#### Discontinued Models and Suggested replacement:

Discontinued Model	Suggested replacement	
EE-SA105	No suggested replacement	
EE-SY1200	EE-SY199	
EE-SY1200-1	EE-SY199-1	

Discontinued Model Model EE-SY1200 / EE-SY1200-1	Suggested replacement Model EE-SY199 / EE-SY199-1
Black	Black

### Wire Connection:

Wire connection Wire con	naction		
	Wire connection		
	Linection pattern (NC)		
	Internal circuit		
Terminal No. Name	Terminal No. Name		
A Anode	A Anode		
K Cathode	K Cathode		
C Collector	C Collector		
E Emitter	E Emitter		

#### **Dimensions:**

Discontinued Model Model EE-SY1200 / EE-SY1200-1	Suggested replacement Model EE-SY199 / EE-SY199-1
Dimensions W×L×H : 3.2mm×1.9mm×1.1mm Sensing distance: 1mm ~ 4mm	Dimensions W×L×H: 3.2mm×1.7mm×1.1mm Sensing distance: 1mm
Detector center Emitter center (0.7) $1.9$ (0.7) $(0.8)$ $(0.8)$	(0.7) Center of receiver element (0.55) $(0.7)$ $(0.65)(0.7)$ $(0.65)(0.7)$ $(0.65)(0.65)$ $(0.65)(0.65)$ $(0.65)(0.65)$ $(0.65)$
	Resin part of light shielding module
E 1.2 K 200 0.7 C A	Direction pattern (NC)

#### **Characteristics:**

Characteristics:	Discontinue INteriol	0		
ltem	Discontinued Model Model EE-SY1200 / EE-SY1200-1	Suggested replacement Model EE-SY199 / Model EE-SY199-1		
Emitter Forward current	Maximum Ratings 50 mA			
Emitter pulse forward current	Maximum Ratings 500 mA (Conditions The pulse width is 10 µs maximum with a frequency of 100 Hz.)	_		
Emitter Reverse voltage	Maximum Ratings 4 V	Maximum Ratings 6 V		
Detector Collector-Emitter	Maximum Ratings 30 V	Maximum Ratings 35 V		
Detector Emitter –Collector	Maximum Ratings 5 V	Maximum Ratings 6 V		
Detector Collector current	Maximum Ratings 20 mA			
Detector Collector dissipation	Maximum Ratings 50 mW	Maximum Ratings 75 mW		
Operating temperature	-25°C ~ 85°C			
Storage temperature	-40°C ~ 100°C			
Emitter Forward voltage	TYP:1.2 V MAX:1.4 V (Conditions IF=20mA)			
Emitter Peak emission wavelength	TYP: 940nm	TYP: 950nm		
Detector Light current 1	MIN: 200 uA MAX: 1000 uA (Conditions IF=10mA、VCE=2V、 aluminum vapor deposition glass、d=4 mm)			
Detector Light current 2	MIN: 150 uA (Conditions IF=4mA、VCE=2V、 aluminum vapor deposition glass、d=1 mm)	MIN: 40 uA TYP: 85 uA MAX: 130 uA (Conditions IF=4mA, VCE=2V, Aluminum- deposited surface, d=1 mm)		
Detector Dark current	MAX: 200 nA (VCE=10V、0 lx)	MAX: 100 nA (VCE=20V, 0 lx)		
Detector Leakage current 1	MAX: 500 nA (Conditions IF=10mA、VCE=2V、 Non- reflective state)	_		
Detector Leakage current 2	MAX: 200 nA (Conditions IF=4mA、VCE=2V、 Non- reflective state)	MAX: 500 nA (Conditions IF=4mA 、VCE=2V 、 Non- reflective state)		
Detector Peak spectral sensitivity wavelength	TYP:850 nm	TYP:930 nm		
Rising time	TYP:30 us (Conditions Vcc=2 V, RL=1 kΩ, IL=100 uA, d=1 mm)	TYP:20 us MAX:100 us (Conditions Vcc=2 V、RL=1 kΩ、IL=100 uA、 d=1 mm)		
Falling time	TYP:30 us (Conditions Vcc=2 V, RL=1 k $\Omega$ , IL=100 uA, d=1 mm)	TYP:20 us MAX:100 us (Conditions Vcc=2 V、RL=1 kΩ、IL=100 uA、 d=1 mm)		

\* Sales teams should communicate this discontinuation with their OEM's and CEM's. For further technical support and any questions, please communicate with Product Marketing.

Specifications in this product news are as of the issue date and are subject to change without notice. Only main changes in specifications are described in this document. Please be sure to read the relevant catalogs, datasheets, product specifications, instructions, and manuals for precautions and necessary information when using products. This PCN is intended for use in the Americas Last time buy dates are subject to change based on availability