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| NO: PMS - 022 | PRODUCT: EE-SY193 – Photomicrosensor (Reflective) |
| DATE: September 2020 | TYPE: DISCONTINUATION – Streamline Product Offering |

EE-SY193 Photomicrosensor (Reflective) – DISCONTINUATION

In an effort to streamline our product offering and focus on popular models of Omron’s line of Photomicrosensors, OMRON will discontinue the EE-SY193 Photomicrosensor model in February 2021. Although there are no direct drop-in replacements, Omron suggests consideration of our EE-SY199 or EE-SY1200 Photomicrosensor models for use in new designs. Despite differences in characteristics and dimensions, these sensors can be considered to be a functional equivalents. Please carefully read through this notification and note the differences. The following details will fully explain the discontinuation and replacement considerations; should you have any additional questions, however, please communicate with the Sensor Product Manager, Cary Horan.

LAST Order date (Last Time Buy Date)

February 26, 2021

| | | | |
|---|---|---|---|
|  | <p>Product Discontinuation Photomicrosensor (Reflective) Model EE-SY193</p> |  | <p>Suggested Replacement for <u>new</u> designs Photomicrosensor (Reflective) Model EE-SY199 Model EE-SY1200</p> |
|---|---|---|---|

Differences from discontinued product:

Please Note: Dimensions and electrical characteristics have slight differences. However, operation methods are fully compatible.

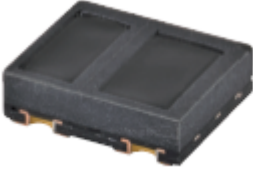


| Suggested replacement Model | Body Color | Dimen -sions | Wire connection | Mounting Dimensions | Charact -eristics | Operation ratings | Operation methods |
|-----------------------------|------------|--------------|-----------------|---------------------|-------------------|-------------------|-------------------|
| EE-SY199 | ** | * | * | * | * | - | - |
| EE-SY1200 | ** | * | * | * | * | - | - |

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

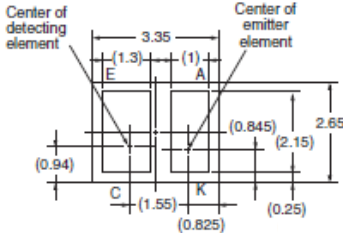
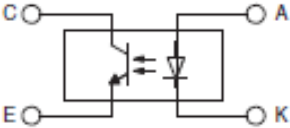
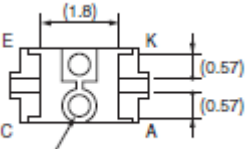
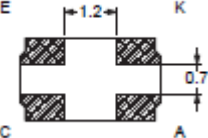
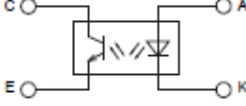
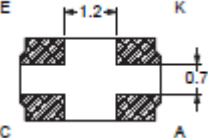
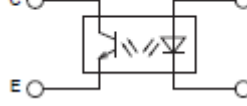
Discontinued Model and Suggested Replacements:

| Discontinued Product | | Suggested Replacement for <u>new</u> designs | |
|----------------------|--------------|--|--------------|
| Models | Product code | Models | Product code |
| EE-SY193 | EESY1246H | EE-SY199 | EESY1278F |
| | | EE-SY1200 | EESY1283B |

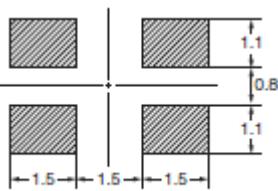

Body Color:

| Discontinued Product Model EE-SY193 | Suggested Replacement Model EE-SY199 / EE-SY1200 | |
|---|--|--|
| <p>Black</p>  | <p>Black</p> <p>Model EE-SY199</p>  | <p>Model EE-SY1200</p>  |

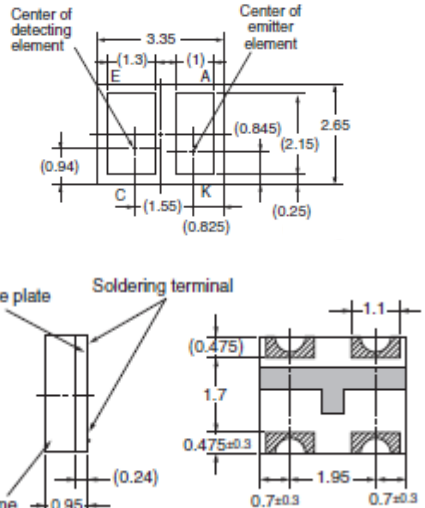
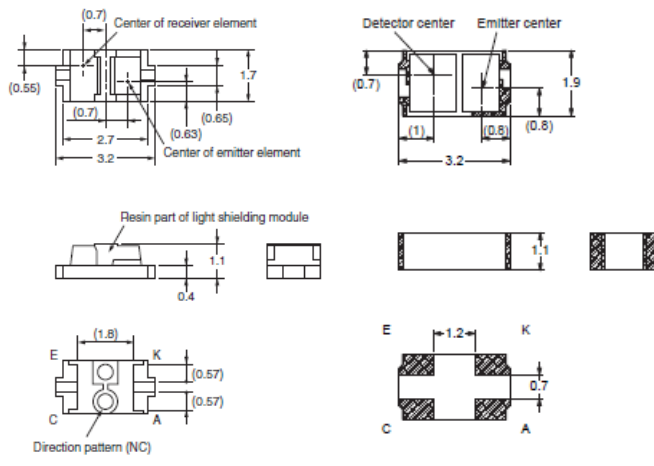
Wire Connection:

| Discontinued product Model EE-SY193 | Suggested Replacement Model EE-SY199 / EE-SY1200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|------|---|-------|---|---------|---|-----------|---|---------|---|--------------|------|---|-------|---|---------|---|-----------|---|---------|---|--------------|------|---|-------|---|---------|---|-----------|---|---------|
| <p>Wire connection</p>  <p>Internal Circuit</p>  <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Name</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Anode</td> </tr> <tr> <td>K</td> <td>Cathode</td> </tr> <tr> <td>C</td> <td>Collector</td> </tr> <tr> <td>E</td> <td>Emitter</td> </tr> </tbody> </table> | Terminal No. | Name | A | Anode | K | Cathode | C | Collector | E | Emitter | <p>Wire connection</p>  <p>Direction pattern (NC)</p>  <p>Internal Circuit</p>  <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Name</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Anode</td> </tr> <tr> <td>K</td> <td>Cathode</td> </tr> <tr> <td>C</td> <td>Collector</td> </tr> <tr> <td>E</td> <td>Emitter</td> </tr> </tbody> </table> | Terminal No. | Name | A | Anode | K | Cathode | C | Collector | E | Emitter | <p>Wire connection</p>  <p>Internal Circuit</p>  <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Name</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Anode</td> </tr> <tr> <td>K</td> <td>Cathode</td> </tr> <tr> <td>C</td> <td>Collector</td> </tr> <tr> <td>E</td> <td>Emitter</td> </tr> </tbody> </table> | Terminal No. | Name | A | Anode | K | Cathode | C | Collector | E | Emitter |
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| K | Cathode | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| E | Emitter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Mounting Dimensions:

| <p align="center">Discontinued Product Model EE-SY193</p> | <p align="center">Suggested Replacement Model EE-SY199 / EE-SY1200</p> |
|--|---|
| <p>Recommended soldering patterns</p>  | <p>Recommended soldering patterns</p>  <p>Note: 1. The shaded portion in the above figure may cause shorting. Do not wire in this portion. 2. The dimensional tolerance for the recommended soldering pattern is ± 0.1 mm.</p> |

Dimensions:

| <p align="center">Discontinued Product Model EE-SY193</p> | <p align="center">Suggested Replacement Model EE-SY199 / EE-SY1200</p> |
|---|---|
| <p>Dimensions $W \times L \times H : 2.65\text{mm} \times 3.35\text{mm} \times 0.95\text{mm}$</p>  | <p>Dimensions $W \times L \times H : 1.7\text{mm} \times 3.2\text{mm} \times 1.1\text{mm}$</p> <p align="right">$W \times L \times H : 1.9\text{mm} \times 3.2\text{mm} \times 1.1\text{mm}$</p>  |

Characteristics:

| Item | Discontinued Product Model EE-SY193 | Suggested Replacement Model EE-SY199 / EE-SY1200 | |
|--|--|--|---|
| Emitter Forward current | Maximum Ratings 25 mA | Maximum Ratings 50 mA | |
| Emitter Reverse voltage | Maximum Ratings 6 V | Maximum Ratings 4 V | |
| Detector Collector-Emitter | Maximum Ratings 18 V | Maximum Ratings 35 V | Maximum Ratings 30 V |
| Detector Collector current | Maximum Ratings 20 mA | | |
| Detector Collector dissipation | Maximum Ratings 75 mW | Maximum Ratings 50 mW | |
| Operating temperature | -30°C ~ 80°C | -25°C ~ 85°C | |
| Storage temperature | -40°C ~ 85°C | | -40°C ~ 100°C |
| Emitter Forward voltage | TYP:1.1 V MAX:1.3 V (Conditions IF=4mA) | TYP:1.2 V MAX:1.4 V (Conditions IF=20mA) | |
| Emitter Peak emission wavelength | TYP: 940nm (Conditions IF=20mA) | TYP: 950nm | TYP: 940nm |
| Detector Light current | MIN: 100 uA TYP: 150 uA MAX: 360 uA (Conditions IF=4mA, VCE=2V) | MIN: 40 uA TYP: 85 uA MAX: 130 uA (Conditions IF=4mA, VCE=2V) | MIN: 200 uA MAX: 1000 uA (Conditions IF=10mA, VCE=2V) |
| Detector Dark current | MAX: 100 nA (VCE=10V, 0 lx) | MAX: 100 nA (VCE=20V, 0 lx) | MAX: 200 nA (VCE=10V, 0 lx) |
| Detector Leakage current | MAX: 1 uA (Conditions IF=4mA, VCE=2V) | MAX: 500 nA (Conditions IF=4mA, VCE=2V) | MAX: 500 nA (Conditions IF=10mA, VCE=2V) |
| Detector Peak spectral sensitivity wavelength | TYP:900 nm | TYP:930 nm | TYP:850 nm |

* 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