

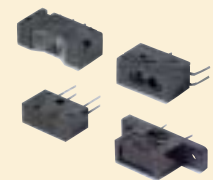



Photo IC	
Non-Amplified	Non-Amplified
	
Sub-category	Slotted Photo IC with connector
Models	EE-SX4235A-P2
Connection type	Connector*
Features	<ul style="list-style-type: none"> • Unique snap-in mounting mechanism eliminates screws and nuts • Compatible with 1.0, 1.2, and 1.6 mm PCBs
Slot width mm (in)	5 (0.2)
Output logic	Light-ON
Max. forward current mA	–
Supply voltage (VDC)	7 VDC
Operating temperature	–25° to 75°C
Output low voltage (V)	0.35 V max.
Output high voltage (V)	(V _{cc} x 0.9) V min.
Response frequency (Hz)	3,000 Hz
Output permissible dissipation (mW)	250 mW
Forward voltage (V)	–
Hysteresis	–
Rising time (low to high)	–
Falling time (high to low)	–
Current consumption (mA)	30 mA max.

*Applicable Mating Connector
AMP 175778-3
AMP 173977-3

Reflective	
Non-Amplified	Non-Amplified
	
Sub-category	Reflective PCB mount phototransistor
Model numbers	EE-SY169, EE-SY169A, EE-SY169B, EE-SB5-B, EE-SF5-B
Connection type	PCB mount
Features	<ul style="list-style-type: none"> • Ideal for office automation and computer peripheral equipment • Infrared LED and photo-transistor assure long life
Sensing distance mm(in)	5 (0.2)
Max. forward current (mA)	50 mA (40 mA: EE-SY169, EE-SY169B)
Supply voltage (VDC)	5 to 30 V
Light current (mA)	EE-SY169(A)(B): 160 µA to 2000 µA; EE-SB5/EE-SF5-B: 200 µA to 2000 µA
Response frequency (Hz)	15 kHz
Ambient operating temperature (°C)	0° to 70°C

EE-SB5, EE-SF5

Solder terminals

- Sensor housing reduces external light's influence
- High resolution sensing

5 (0.2)

50 mA

5 to 30 V

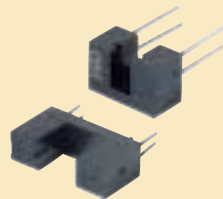
200 µA to 2000 µA

15 kHz

–25° to 85°C

NOTE: The above specifications do not apply to all models listed. For specific model information, visit www.omron.com/oei or contact your Omron representative.

Phototransistors



Non-Amplified

Non-Amplified

Non-Amplified

Non-Amplified

Sub-category	Slotted phototransistor with connector	Miniature PCB mount transmissive	Slotted surface mount phototransistor output	Slotted actuator adaptable phototransistor output
Models	EE-SX1235A-P2	EE-SX198, EE-SX1018, EE-SX1035, EE-SX1041, EE-SX1042, EE-SX1046, EE-SX1055, EE-SX1070, EE-SX1071, EE-SX1081, EE-SX1088, EE-SX1096, EE-SX1103, EE-SX1105, EE-SX1106	EE-SX1107, EE-SX1108, EE-SX1109, EE-SX1131 (dual channel)	EE-SA107-P2
Connection type	Connector*	PCB mount	Surface mount	Connector*
Features	<ul style="list-style-type: none"> Electrical connections using AMP connector Compact and high-resolution 	<ul style="list-style-type: none"> Infrared LED and phototransistor for long life Narrow aperture slit for high resolution sensing Compact size 	<ul style="list-style-type: none"> Ultra-compact High-resolution sensing with phototransistor output Ideal for restricted space applications 	<ul style="list-style-type: none"> High resolution sensing Non-contact, noiseless sensing
Slot width mm(in)	5 (0.2)	2 to 8 (0.08 to 0.32)	1 to 3 (0.04 to 0.12)	3.6 (0.14)
Max. forward current (mA)	50 mA	50 mA	25 mA	50 mA
Max. collector dissipation (mW)	100 mW	100 mW	75 mW	100 mW
Operating temperature (°C)	-25° to 95°C	-25° to 85°C	-30° to 85°C	-25° to 85°C
Forward voltage (V)	1.2 V – typ.	1.2 to 1.3 V	1.1 V – typ.	1.2 V – typ.
Light current (mA)	0.6 mA to 14mA max.	0.03 to 14 mA max.	0.05 to 0.50 mA	0.5 to 14 mA
Collector-emitter saturated voltage (V)	0.4 V max.	0.4 V max.	0.1 V – typ.	0.4 V max.
Rising time (low to high)	8 μS – typ.	4 μS – typ. (10 μS – typ.: EE-SX1103, EE-SX1105, EE-SX1106)	10 μS – typ.	8 μS – typ.
Falling time (high to low)	8 μS – typ.	4 μS – typ. (10 μS – typ.: EE-SX1103, EE-SX1105, EE-SX1106)	10 μS – typ.	8 μS – typ.
	*Applicable Mating Connector AMP 175778-3 AMP 173977-3			*Applicable Mating Connector AMP 175778-3 AMP 173977-3

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