

## Photomicrosensors

### EE-SY Series Phototransistor

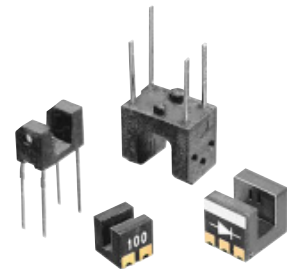
- ▶ Sensing Accuracy as High as  $\pm 0.6$  mm
- ▶ Model with a Red LED Assures Smooth Sensing of Dye Stuffs (EE-SY169)
- ▶ Ideal to Be Built into Printers and Copy Machines for Sensing Paper Edges
- ▶ Integral Red LED



Stock No.	Mfr.'s Type	Sensing Method	Sensing Distance	Weight	EACH		
					1-24	25-49	50-99
821-0150	EE-SY169	Reflective, convergent lens	4 mm	1.0 g	9.60	8.80	8.38
821-0152	EE-SY169A	Reflective, convergent lens	4 mm	1.0 g	8.59	7.88	7.50

### EE-SX Series Photomicrosensor

- ▶ Surface Mount Design, and Tape and Reel Packaging Facilitate Automated PCB Assembly
- ▶ Compact Size Makes These Sensors Ideal for Use in Applications with Restricted Space
- ▶ High-Resolution Sensing with Phototransistor Output
- ▶ Dual Channel Model That Is Ideal for Encoder Applications (EE-SX1131)



Stock No.	Mfr.'s Type	Width	Depth	Sensing Object	Weight	EACH		
						1-49	50-99	100-249
821-0153	EE-SX1107	1 mm	2.0 mm	0.15 × 0.6 mm min.	0.05 g	.93	.85	.81
821-0154	EE-SX1108	2 mm	2.8 mm	0.30 × 1.0 mm min.	0.10 g	.93	.85	.81
821-0155	EE-SX1109	3 mm	3.5 mm	0.50 × 1.0 mm min.	0.10 g	.93	.85	.81
821-0156	EE-SX1131	2 mm	2.8 mm	0.30 × 1.0 mm min.	0.10 g	.93	.85	.81

### Photomicrosensor EE-SY169B and EE-SX4134

#### EE-SY169B

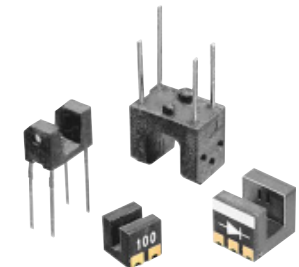
- ▶ High-Quality Model with Plastic Lenses
- ▶ Highly Precise Sensing Range with a Tolerance of  $\pm 0.6$  mm Horizontally and Vertically
- ▶ With a Red LED Sensing Dyestuff-Type Links
- ▶ Limited Reflective Model
- ▶ Higher Gain Than EE-SY169
- ▶ Possible to Get the Same I<sub>L</sub> As EE-SY169 With I<sub>F</sub>=10 mA. (Half Of EE-SY169 Condition)
- ▶ RoHS Compliant

#### EE-SX4134

- ▶ Ultra-Compact Model
- ▶ Photo IC Output Model
- ▶ Operates at a VCC of 2.2 to 7 V
- ▶ PCB Surface Mounting Type
- ▶ RoHS Compliant



Reflective



Transmissive

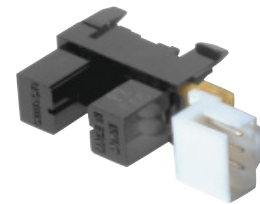


Stock No.	Mfr.'s Type	Description	EACH		
			1-24	25-49	50-99
821-0151	EE-SY169B	Photomicrosensor (Reflective)	6.02	5.52	5.26
821-0157	EE-SX4134	Photomicrosensor (Transmissive)	4.47	4.09	3.90

### Economical Non-Amplified Transmissive Sensors

#### Features

- ▶ General-Purpose Model (EE-SX1041)
- ▶ 14.5 mm Tall Model with a Deep Slot (EE-SX1042)
- ▶ PCB Mounting Type
- ▶ High Resolution with a 0.5 mm Wide Aperture
- ▶ Snap-In Mounting Model (EE-SX1235A-P2)
- ▶ Mounts to 1.0, 1.2 and 1.6 mm Thick PCBs (EE-SX1235A-P2)
- ▶ 5 mm Wide Slot, (8 mm EE-SX1070)
- ▶ Connects to Tyco Electronics AMP CT-Series Connectors (EE-SX1235A-P2)
- ▶ RoHS Compliant



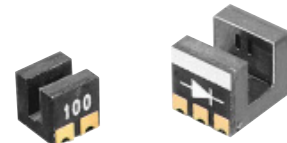
Stock No.	Mfr.'s Type	Aperture Size (mm) W × L	Slot Width (mm)	I <sub>L</sub>				tr, tf				EACH			
				Min. (mA)	Max. (mA)	IF (mA)	VCE (V)	tr (μsec.)	tf (μsec.)	VCC (V)	RL (Ω)	I <sub>L</sub> (mA)	1-49	50-99	100-249
821-8131	EE-SX1235A-P2	0.5 × 5.0	5.0	0.6	14.0	20	5	8	8	5	100	1	1.37	1.28	1.21
821-8132	EE-SX1041	0.5 × 6.0	6.0	0.5	14.0	50	30	4	4	5	100	5	1.83	1.68	1.60
821-8008	EE-SX1070	0.5 × 2.2	8.0	0.5	0.5	10	10	4	4	5	100	20	1.46	1.34	1.28
821-8009	EE-SX1042	0.5 × 5.0	5.0	0.5	10.0	50	30	4	4	5	100	5	1.19	1.11	1.06

### Photomicrosensors

#### EE-SX

Ultra compact photomicrosensors ideal for use in applications with restricted spaces. High resolution sensing (0.4 mm). Each sensor has phototransistor output. Low profile 3.3 mm (EE-SX1105). **Sensing Method:** Transmissive. **Dimensions (L × W × H):** 3.3 × 4.9 × 2.6 mm.

Stock No.	Mfr.'s Type	Slot		Sensing Object	Weight	EACH		
		Width	Depth			1-49	50-99	100-249
821-8015	EE-SX1103	2 mm	2.8 mm	Opaque 0.4 × 1.2 mm min.	0.15 g	1.07	.98	.94
821-8016	EE-SX1105	2 mm	2.6 mm	Opaque 0.4 × 1.0 mm min.	0.06 g	1.07	.98	.94
821-8017	EE-SX1106	3 mm	3.9 mm	Opaque 0.4 × 1.2 mm min.	0.18 g	1.07	.98	.94



### Reflective Photomicrosensors

- ▶ Dust Tight
- ▶ 5 mm Sensing Distance

Stock No.	Mfr.'s Type	Sensing Method	Terminal Type	EACH		
				1-49	50-99	100-249
821-0170	EE-SB5	Reflective	Solder	4.20	3.85	3.67
821-0304	EE-SB5-B	Reflective	PCB	4.04	3.70	3.53
821-0305	EE-SF5	Reflective	Solder	4.01	3.76	3.59
821-0306	EE-SF5-B	Reflective	PCB	6.35	5.82	5.54

