



# Product Discontinuation Notices

June 1, 2009

**Photomicro Sensors** 

No.2009189E

# Photomicro Sensors EE-SY124 series Product Discontinuation Announcement

#### Product Discontinuation Photomicro Sensors

# Recommended Replacement

Photomicro Sensors

Model EE-SY124 series

Model EE-SY171 Model EE-SY199 (EE-SX199 will be released at Dec.2009)

Discontinuation date : The end of March, 2010

## Caution on recommended replacement

Could you please confirm Dimension and Specifications of the EE-SY124 and recommended type before your new designing. Since the EE-SY124 and recommended type are not complete same size and Spec. And the EE-SY199 will be released at Dec.2009 but when you need this sensor samples for new designing, could you please contact with our sales staff.

## Difference from discontinued product

Model	Body Color	Dimen sions	Wire connection	Mounting Dimensions	Charact eristics	Operation ratings	Operation methods
EE-SY171	**				*	*	*
EE-SY199	**				*	*	*

\*\* : Fully compatible

\* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

#### Product Discontinuation and recommended replacement

Product discontinuation	Recommended replacement				
	EE-SY171				
EE-SY124 series	EE-SY199				
	(EE-SY199 will be released at Dec.2010)				

#### Dimensions

#### <EE-SY124 series and EE-SY171>



#### <u><EE-SY124 series and</u> EE-SY199>



#### **Terminal dimension**

#### <EE-SY124 series and EE-SY171>



#### <EE-SY124 series and EE-SY199>



#### Packaging and Minimum order Qty.

	EE-SY124 series	EE-SY171	EE-SY199 (this sensor will be released at Dec.2009)
Packaging	50pcs.in each stick and Max.80 sticks per 1	25pcs. in each bag and 10bag per 1 packaging	2000pcs. per 1 reel and Aluminum damp
Minimum order Qty.	packaging box	box	proofing packing
winning order Qty.	2000pcs.	$250 \mathrm{pcs.}$	2000pcs.

# Absolute Maximum Ratings (Ta=25°C)

Item	Model to be discontinued EE-SY124 series	Recommended replacement EE-SY171	Recommended replacement EE-SY199 (this sensor will be released at Dec.2009)
Forward current	50mA	50mA	50mA
Reverse voltage	4V	4V	6V
Collector-Emitter voltage	30V	30V	35V
Emitter-Collector voltage	5V	-	6V
Collector current	20mA	20mA	20mA
Collector dissipation	75mW	100mW	75mW
Operating temperature	-25 to +85°C	-40 to +85°C	-25 to +85°C
Storage temperature	-40 to +100°C	-40 to +85°C	-40 to +100°C
Soldering temperature	260°C max. less than 5 sec.	260°C max. less than 10 sec.	260°C max. less than 3 sec. 240°C max. less than 10 sec.

# Characteristics (Ta=25°C)

### <EE-SY124 series and EE-SY171>

		to be discont E-SY124 serie		Recommended replacement EE-SY171			
Item	Value			Value			
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.	
Forward voltage	-	1.2V	1.4V	-	1.2V	1.4V	
	Condition : II	F=20mA		Condition : IF=20mA			
Dovorco ourront	-	0.01µA	10µA	-	-	10µA	
Reverse current	Condition : V	R=4V		Condition : V	Condition : VR=6V		
Peak emission	-	900nm	-	-	950nm	-	
wavelength	Condition : II	F=4mA		Condition : IF=4mA			
	50µA	-	300µA	40µA	85μΑ	130µA	
	Condition : II	F=4mA,VCE=2	2V	Condition : IF=20mA,VCE=10V			
Light current	Sensing object: Aluminum-deposited			Sensing object: White paper with a 90%			
	surface			reflection ratio			
	Sensing distance:1mm			Sensing distance:3.5mm			
Dark current	-	2nA	200nA	-	2 nA	200 nA	
Dark current	Condition : VCE=10V, 0lx			Condition : VCE=10V, 0lx			
Collector-Emitter	-	-	-	-	-	-	
saturated voltage	-			-			
Rising time tr	-	35µs	-	-	20µs	100µs	
	Condition : V	CC=2V,RL=11	«Ω,IF=100μA	Condition : V	CC=2V,RL=1	«Ω,IF=100µA	
Falling time tf	-	$25 \mu s$	-	-	20 µs	100 µs	
	Condition : V	CC=2V,RL=11	xΩ,IF=100µA	Condition : V	CC=2V,RL=1	xΩ,IF=100µA	

# Characteristics (Ta=25°C)

# <EE-SY124 series and EE-SY199>

		l to be discont E-SY124 serie		Recommended replacement EE-SY199 (this sensor will be released at Dec.2009)			
ltem		Value		Value			
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.	
Forward voltage	-	$1.2\mathrm{V}$	1.4V	-	1.2V	$1.4\mathrm{V}$	
Forward voltage	Condition : II	F=20mA		Condition : IF=20mA			
Poveree ourrent	-	0.01µA	10µA	-	0.01µA	10µA	
Reverse current	Condition : VR=4V			Condition : VR=6V			
Peak emission	-	950nm	-	-	950nm	-	
wavelength	Condition : II	F=4mA	•	Condition : IF=4mA			
	50µA	-	300µA	40µA	85μΑ	130µA	
	Condition : IF=4mA,VCE=2V			Condition : IF=4mA,VCE=2V			
Light current	Sensing object: Aluminum-deposited			Sensing object: Aluminum-deposited			
	surface			surface			
	Sensing distance:1mm			Sensing distance:1mm			
Dark current	-	2nA	200nA	-	1nA	100nA	
Dark current	Condition : VCE=10V, 0lx			Condition VCE=20V, 0lx			
Collector-Emitter saturated voltage	-	-	-	-	-	-	
		-			-		
Rising time tr	-	$35 \mu s$	-	-	20µs	100µs	
Rising unle u	Condition : V	CC=2V,RL=11	xΩ,IF=100µA	Condition : V	CC=2V,RL=1	xΩ,IF=100µA	
Falling time tf	-	$25 \mu s$	-	-	20µs	100µs	
	Condition : VCC=2V,RL=1kΩ,IF=100μA			Condition : VCC=2V,RL=1kΩ,IF=100μA			