



# Product Discontinuation Notices

December 1, 2009

**Photomicro Sensors** 

No. 2009303E

## Discontinuation Notice of Photomicrosensors. EE-SB5M series

**Product Discontinuation** 

## **Recommended Replacement**

X

EE-SB5M Series



Discontinuation date : The end of May, 2010

### Caution on recommended replacement

Our Amplified photomicrosensors, model EE-SB5M series will be discontinued at the end of May, 2010. We recommend Amplified photomicrosensors, type EE-SY672 for replacement of them (except the EE-SB5M-F, EE-SB5M-G and EE-SB5MC-H). And we recommend to change your products design or to order it collectively including a necessary amount in the future by May, 2010.

## Difference from discontinued product

Model	Body Color	Dimen sions	Wire connection	Mounting Dimensions	Charact eristics	Operation ratings	Operation methods
EE-SY672	**	*	*	*	*	*	**

\*\* : Fully compatible

\* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

## Product Discontinuation and recommended replacement

Product dis	continuation	Recommended replacement		
Model	Product code	Model	Product code	
EE-SB5M	EESB1001H	EE-SY672	EESY1124M	
EE-SB5M-F	EESB2030G	No recommended replacement		
EE-SB5M-G	EESB2031E	No recommended replacement		
EE-SB5MC	EESB2001C	EE-SY672	EESY1124M	
EE-SB5MC-H	EESB2011M	No recommended replacement		

#### Dimensions





#### Internal connection



Item		Product discontinuation		Recommended replacement	
		EE-SB5M	EE-SB5MC	EE-SY672	
Sensing distance		5mm		1 to 5mm	
Sensing distance		(Reflection factor 90%)		(Reflection factor 90%)	
Differential	distance	0.1mm		0.5mm	
Light sourc	e	GaAs infrared LED		GaAs infrared LED	
Supply volt	200	5-10% to 12+10% VDC		5-10% to 24+10% VDC	
	-	Ripple (p-p): 10% MAX.		Ripple (p-p): 10% MAX.	
Current cor	nsumption	36mA MAX.		40mA MAX.	
		Load power supply voltage:		Load power supply voltage:	
		5 to 24VDC		5 to 24VDC	
Control out	nut	80mA load current with a residual		100mA load current with a residual	
	put	voltage 0.8V MAX.		voltage 0.8V MAX.	
		40mA load current with a residual		40mA load current with a residual	
		voltage 0.4V MAX.		voltage 0.4V MAX	
	Stage of output	OFF	ON	OFF	ON
<u> </u>	transistor when			(Terminal [L] is	(Terminal [L] is
Stage of	object is not			short-circuited)	opened)
output transistor	sensed	ON	OFF	ON	OFF
transistor	Stage of output transistor when	UN	UFF	(Terminal [L] is	(Terminal [L] is
	object is sensed			short-circuited)	opened)
Response		50Hz		50Hz	openeu)
Tresponse	irequency	Operating : -25 to +55°C		Operating : -25 to +55°C	
Ambient te	mperature range	Storage : -30 to +80°C		Storage : -30 to +80°C	
		Operating : 5 to 85%RH		Operating : 5 to 85%RH	
Ambient hu	imidity range	Storage : 5 to 95%RH		Storage : 5 to 95%RH	
		Destruction:		Destruction:	
		20 to 2000 Hz		20 to 2000 Hz	
		(Peak acceleration: 200m/s <sup>2</sup> )		(Peak acceleration: 100m/s <sup>2</sup> )	
Vibration re	esistance	1.5mm double amplitude for		1.5mm double amplitude for 2h	
		4cycle (4min periods) each in X, Y		(4min periods) each in X, Y and Z	
		and Z directions		directions	
		Destruction:		Destruction:	
Shock resistance		15000m/S <sup>2</sup> for 3 times each in X,		500m/S <sup>2</sup> for 3 times each in X, Y	
		Y and Z directions		and Z directions	

Item		Product discontinuation EE-SB5M-F	Recommended replacement No type
Sensing distance		9.4mm (Reflection factor 18%)	/
Differential distance		0.1mm	/
Light source		GaAs infrared LED	/
Supply voltage		5-10% to 12+10% VDC Ripple (p-p): 10% MAX.	
Current consum	ption	36mA MAX.	
Control output		Load power supply voltage: 5 to 24VDC 80mA load current with a residual voltage 0.8V MAX. 40mA load current with a residual voltage 0.4V MAX.	
Stage of output transistor	Stage of output transistor when object is not sensed Stage of output transistor when	OFF ON	
	object is sensed		
Response frequ	ency	50Hz	
Ambient temper	ature range	Operating : -25 to +55°C Storage : -30 to +80°C	
Ambient humidit	ty range	Operating : 5 to 85%RH Storage : 5 to 95%RH	
Vibration resistance		Destruction: 20 to 2000 Hz (Peak acceleration: 200m/s <sup>2</sup> ) 1.5mm double amplitude for 4cycle (4min periods) each in X, Y and Z directions	
Shock resistance		Destruction: 15000m/S <sup>2</sup> for 3 times each in X, Y and Z directions	

Item		Product discontinuation EE-SB5M-G	Recommended replacement No type
Sensing distance		11.4mm (Reflection factor 90% : white paper)	
Differential dista	ince	0.1mm	
Light source		GaAs infrared LED	
Supply voltage		5-10% to 12+10% VDC Ripple (p-p): 10% MAX.	
Current consum	ption	36mA MAX.	
Control output		Load power supply voltage: 5 to 24VDC 10mA load current with a residual voltage 0.4V MAX.	
Stage of output	Stage of output transistor when object is not sensed	OFF	
transistor	Stage of output transistor when object is sensed	ON	
Response frequ	ency	50Hz	/
Ambient temper	•	Operating : -25 to +55°C Storage : -30 to +80°C	
Ambient humidit	y range	Operating : 45 to 85%RH Storage : 35 to 95%RH	
Vibration resistance		Destruction: 20 to 2000 Hz (Peak acceleration: 200m/s <sup>2</sup> ) 1.5mm double amplitude for 4cycle (4min periods) each in X, Y and Z directions	
Shock resistance		Destruction: 15000m/S <sup>2</sup> for 3 times each in X, Y and Z directions	

Item		Product discontinuation EE-SB5MC-H	Recommended replacement No type
Sensing distance		5 to 15mm (Reflection factor 90%)	
Differential dista	ince	0.1mm	
Light source		GaAs infrared LED	
Supply voltage		5-10% to 12+10% VDC	
		Ripple (p-p): 10% MAX.	
Current consum	ption	36mA MAX.	
		Load power supply voltage:	
		5 to 24VDC	
Control output		80mA load current with a residual	
e e i i i e e i i p e i		voltage 0.8V MAX.	
		40mA load current with a residual	
	<u>.</u>	voltage 0.4V MAX.	
	Stage of output	ON	
	transistor when		
Stage of	object is not sensed		
output	Stage of output	OFF	/
transistor	transistor when	OFF	
	object is		
	sensed		
Response frequ	ency	50Hz	
Ambient temper	ature range	Operating : -25 to +55°C	
7 inbient temper	atare range	Storage : -30 to +80°C	
Ambient humidit	v range	Operating : 10 to 85%RH	
Ambient number ange		Storage : 10 to 95%RH	
Vibration resistance		Destruction:	
		20 to 2000 Hz	
		(Peak acceleration: 200m/s <sup>2</sup> )	/
		1.5mm double amplitude for	/
		4cycle (4min periods) each in X,	/
		Y and Z directions	/
		Destruction:	/
Shock resistance		15000m/S <sup>2</sup> for 3 times each in	/
		X, Y and Z directions	/