

Analog voltage output model

● Absolute Maximum Ratings Exterior Specifications

Item	Symbol	Rated value	Unit	Remarks
Power supply voltage	Vcc	5.5	V	4. Vcc - 2. GND
Input pulse voltage *1	Vp	5.5 *2	V	1. Pulse - 2. GND
Operating temperature	Topr	-10 to 60	°C	With no icing or condensation
Storage temperature	Tstg	-25 to 80	°C	

*1. DC voltage is not covered by warranty.

*2. Pulse width: 800 μs, frequency: 500 Hz

● Exterior Specifications

Connecting method	Weight (g)	Material	
		Case	Lens
Connector	Approx 3.2 g	Polycarbonate (PC)	Acrylic (PMMA)

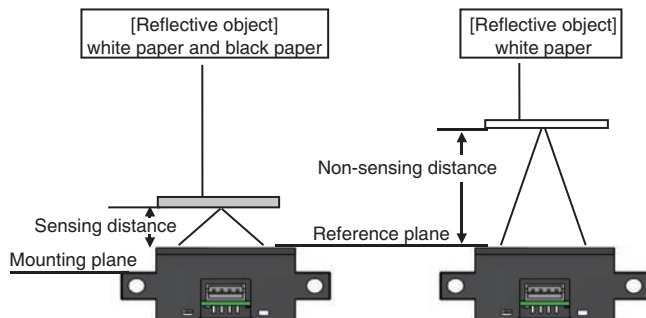
● Electrical and Optical Characteristics (Ta= 25°C, Vcc= 5.0 V)

Item	Symbol	Value			Unit	Condition
		MIN.	TYP.	MAX.		
Operating voltage	Vcc	4.5	5.0	5.5	V	---
Operating input pulse voltage	Vp	3.0	---	5.5	V	---
Maximum output voltage Forward voltage	Vomax	---	3.3	---	V	---
Sensing distance (Black paper)	Lrange	10	---	40	mm	Black paper, Vo ≥ 70 mV
Sensing distance (White paper)	Lrange	10	---	55	mm	White paper, Vo ≥ 70 mV
Non-sensing distance (White paper)	L	85	---	---	mm	White paper, Vo < 30 mV

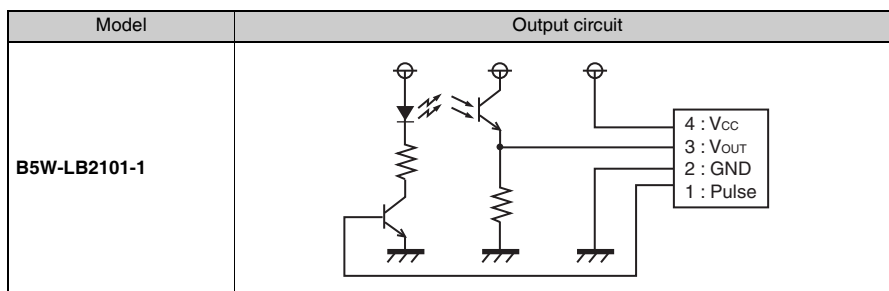
* Frequency = 500 Hz (duty = 40%), input voltage = 5.0 V

Output voltage without reflector = 0 mV

Specified reference plane and mounting surface are as shown Below



Analog voltage output

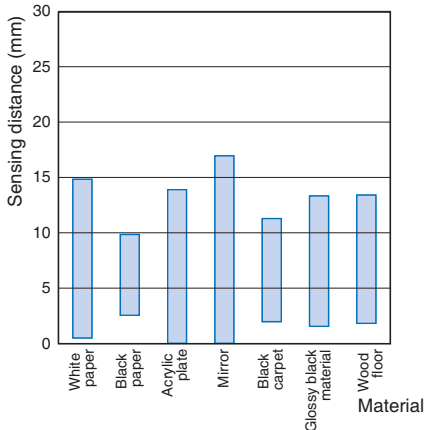


Terminal No.	Name
1.	Pulse
2.	GND
3.	Vout
3. 4.	Vcc

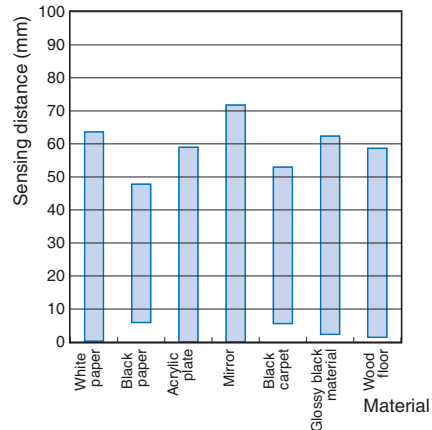
Engineering Data (Reference Value)

Distance Characteristics for Various Reflective Objects

B5W-LB1

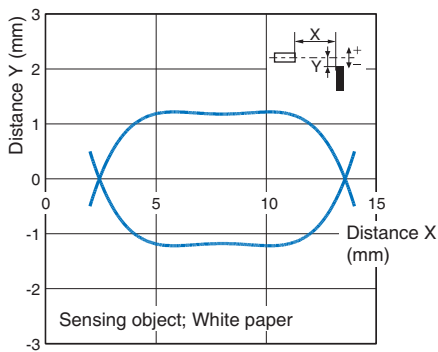


B5W-LB2

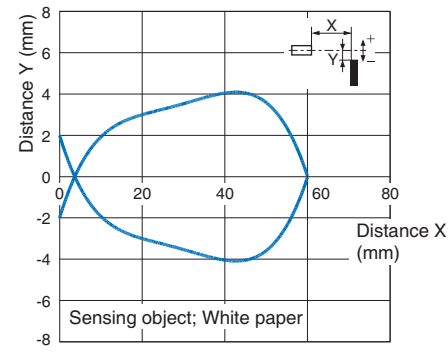


Operating Range (Left and Right)

B5W-LB1

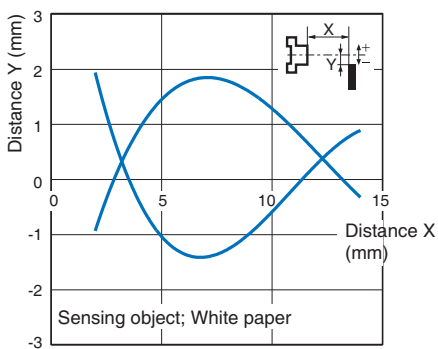


B5W-LB2

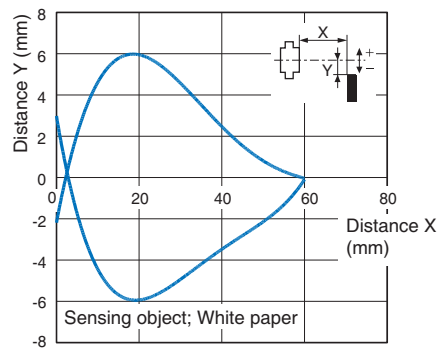


Operating Range (Up and Down)

B5W-LB1

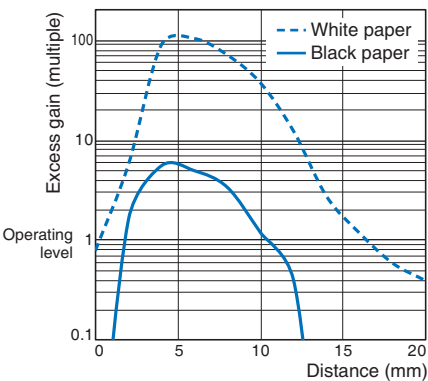


B5W-LB2

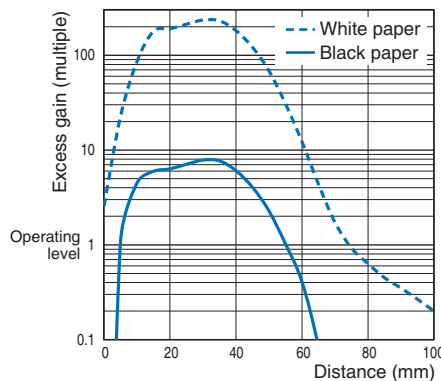


Receiver Output-Sensing Distance Characteristics

B5W-LB1



B5W-LB2112/LB2122



B5W-LB2101

