

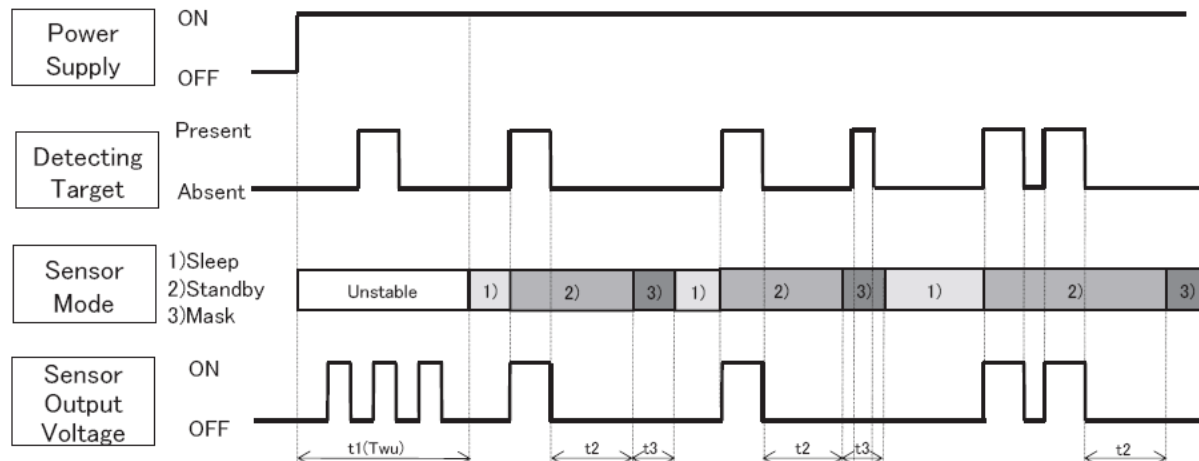
3. Electrical Characteristic (Conditions for Measuring: Ambient temperature: 25° C (77° F))

Items		Symbol	1 μ A type	2 μ A type	6 μ A type	Measured Conditions
Operating Voltage	Min.	Vdd	2.3V DC	2.3V DC	2.3V	—
	Max.		6.0V DC	6.0V DC	6.0V	
Electrical Current Consumption (Sleep mode) ^(*4)	Min	Iw	1.0 μ A	—	—	Iout=0
	Max		1.6 μ A			
Electrical Current Consumption (Standby mode) ^(*5)	Avg.	Iw	1.9 μ A	1.9 μ A	6.0 μ A	Iout=0
	Max.		3.0 μ A	3.0 μ A	12.0 μ A	
Output Current	Max.	Iout	100 μ A	100 μ A	100 μ A	Vout \geq Vdd - 0.5
Output Voltage	Min.	Vout	Vdd - 0.5V DC	Vdd - 0.5V DC	Vdd - 0.5V DC	—
Circuit Stability Time (when voltage is applied)	Avg.	T _{wu}	25s	25s	—	—
	Max.		210s	210s	30s	

(*4) (*5): "Sleep mode" or "Standby mode" is for current consumption 1 μ A type. Please refer to "TIMING CHART".

TIMING CHART

1. Digital Output (For current consumption 1 μ A)



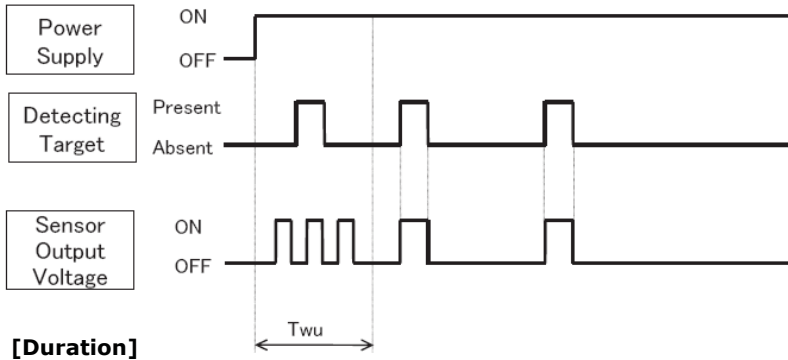
[Mode]

- 1) Sleep Mode : When the output is OFF. The electrical current consumption is around 1 μ A.
- 2) Standby Mode : After the sensor's output reached ON status, the sensor switches to standby mode. The electrical current consumption gets close to 1.9 μ A . When the sensor's output returns to its OFF value after expiration of the "hold time", the sensor switches again to sleep mode.
- 3) Mask Mode : Time during which the output is forced to OFF after the end of the standby mode. (No detection is possible during this period.)

[Duration]

- t1(T_{wu}) : Circuit Stability Time: About 25s. (typ.)
During this stage, the output's status is undefined (ON/OFF) and detection is therefore not guaranteed.
- t2 : Standby Hold Time : About 2.6s (typ.)
Depending on the number of output happening during standby mode, the hold time can differ.
- t3 : Mask Time : About 1.3s (typ.)
During this stage, even if the sensor detects something, output will not switch to ON.

2. Digital Output (For current consumption 2 μ A and 6 μ A)



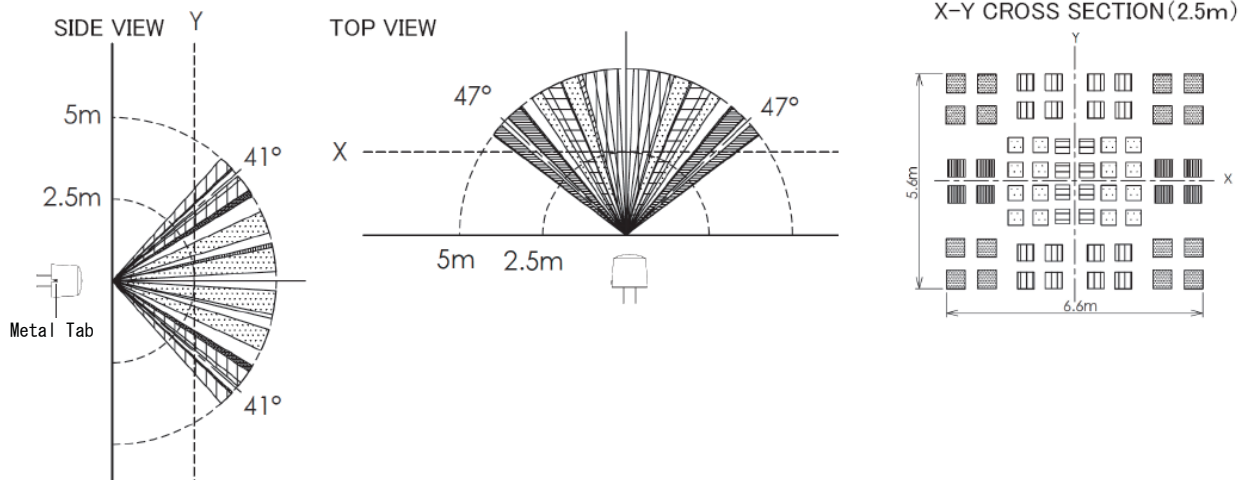
[Duration]

T_{wu} : Circuit Stability Time : About 25s. (typ.) (For 2 μ A)
 About 30s. (Max.) (For 6 μ A)

During this stage, the output's status is undefined (ON/OFF) and detection is therefore not guaranteed.

DETECTION PERFORMANCE

1. Polyethylene-lens type



2. Silicon-lens type

