

# DISTANCE SENSOR



Infrared range finding sensor that uses a triangulation system with an infrared LED and a PSD. This sensor produces analog output that depends on a distance to an object, and is thus ideal for measuring distance to a person or an object.

## ▶ 特長 FEATURES

- 赤外LEDとPSDを使った三角測量方式  
A triangulation system that uses an infrared LED and a PSD
- LED駆動回路とPSD信号処理回路を内蔵  
Integrated LED drive circuit and PSD signal processing circuit
- 対象物までの距離に応じたアナログ出力  
Analog output that depends on a distance to an object
- 短距離検出: 1.5~15cm  
Short range detecting distance: 1.5 ~ 15cm

## ▶ 最大定格 MAXIMUM RATINGS

(Ta=25°C)

Item	Symbol	Rating	Unit
電源電圧 Supply voltage	Vcc	-0.3~+7	V
出力端子電圧 Output terminal voltage	Vo	-0.3~Vcc+0.3	V
動作温度 Operating temp. *1	Topr.	-10~+60	°C
保存温度 Storage temp. *1	Tstg.	-20~+70	°C

\*1. 氷結、結露の無き事  
No icebound or dew.

## ▶ 用途 APPLICATIONS

ロボット、複合機、非接触スイッチ、ATM、自動販売機、  
アミューズメント機器、温水洗浄便座

Robot, Multi function peripheral, Noncontact switch, ATM, Vending machine,  
Amusement machine, Toilet seat with shower unit

## ▶ 推奨動作条件 Recommended operating conditions

Item	Symbol	Min.	Typ.	Max.	Unit
電源電圧 Supply voltage	Vcc	4.5	5.0	5.5	V

## ▶ 電気的光学的特性 ELECTRO-OPTICAL CHARACTERISTICS

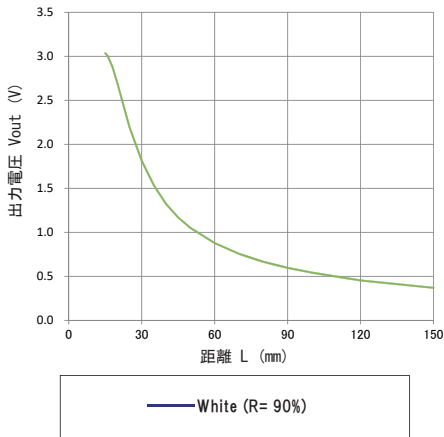
(Ta=25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
消費電流 Current consumption	Icc	平均値 Average	—	18	27	mA
検出距離範囲 Detection distance range *2	$\Delta L$	—	1.5	—	15	cm
出力電圧 Output voltage *3	Vout	L=7cm	0.65	—	1.05	V
出力振幅 Output voltage amplitude *3	$\Delta Vout$	L=15cm→1.5cm	2.25	—	2.85	V

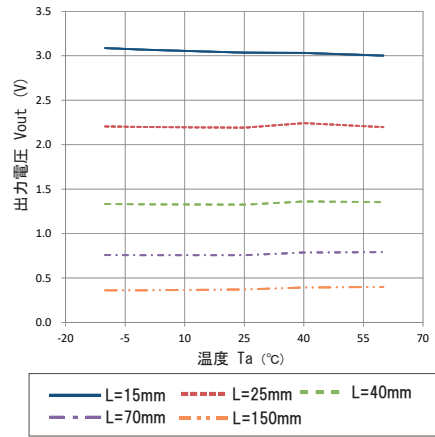
\*2. 検出基準対象物(無光沢反射紙、白、反射率90%)  
Detection standard object (No luster reflection paper, White, Reflectance 90%)

\*3. L:対象物までの距離  
L: Distance to an object

■ 距離特性 Distance Characteristic



■ 温度特性 Temperature Characteristic



▶ 外形寸法 DIMENSIONS (Unit : mm)

