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ON2509

■概 要

ON2509 は、ハイブリッド技術により、反射形ホトセンサにアンプを内蔵した小型、軽量、高精度、高信頼性のホトセンサユニットです。
物体検知用、無接点スイッチとして特に紙検出用のホトセンサとして最適です。

■特 長

- アンプ内蔵形で小形、高信頼性。
- オープンコレクタ出力。
- 検知距離が広い：d=2~7mm。
- 小形コネクタを使用。

■用 途

- 複写機の紙検知
- プリンタの紙検知

■Outline

The ON2509 is a small, light weight, highly precise and reliable photo sensor unit incorporating amplifier in the reflective photo sensor by hybrid technique. Widely applied for object detection, contactless switch and especially paper detection.

■Features

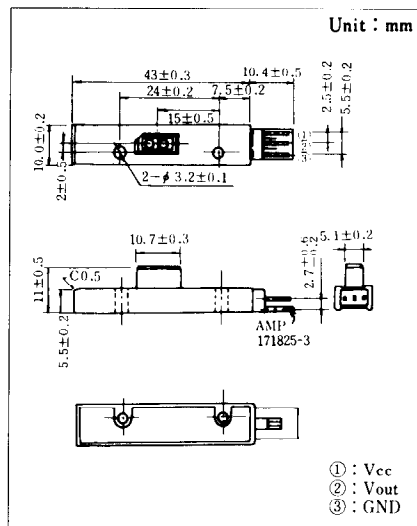
- Small size and high reliability
- Open-collector output
- Long detectable distance : d=2~7mm
- Power supply, output connection with small connector

■Use

- Paper detection of copying machine
- Paper detection of printer

■ 絶対最大定格 Absolute Maximum Ratings (Ta=25℃)

Item	Symbol	Value	Unit
電源電圧	Supply Voltage	V _{CC}	7.2 V
コレクタ損失	Collector Power Dissipation	P _C	360 mW
出力電圧	Output Voltage	V _{O (max)}	24 V
動作周囲温度	Operating Ambient Temperature	T _{opr}	0 ~ +65 ℃
保存温度	Storage Temperature	T _{stg}	-20 ~ +75 ℃



■ 電気的特性 Electrical Characteristics (Ta=25℃)

Item	Symbol	Condition	min.	typ.	max.	Unit
電源電圧	Supply Voltage	V _{CC}	4.5	5.0	5.5	V
電源電流	Supply Current	I _{CC} *1 物体検知時, R _L =∞ Object at Detection, R _L =∞		33		mA
出力吸込電流	Output Sink Current	I _{SINK} *2 物体非検知時, V _O =1.5V Object at Non Detection, V _O =1.5V	6			mA
"L" 出力電圧	"L" Output Voltage	V _{OL} *3 物体非検知時, V _{CC} =5V, I _{SINK} =3mA Object at Non Detection, V _{CC} =5V, I _{SINK} =3mA		0.2	0.4	V
"H" 出力電圧	"H" Output Voltage	V _{OH} *4 物体検知時, R _L =10kΩ V _{CC} =5V, V _O =5V Object at Detection, R _L =10kΩ V _{CC} =5V, V _O =5V	4.7	4.9		V
検知距離	Detection Distance	d *5 V _{CC} =5V		2~7		mm

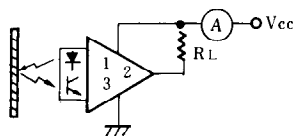
ホトセンサユニット (反射形)

Photosensor Units (Reflective Type)

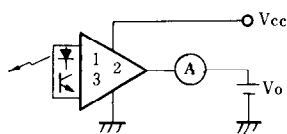
試験回路

Test circuit

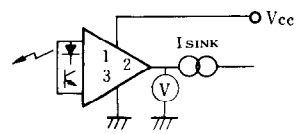
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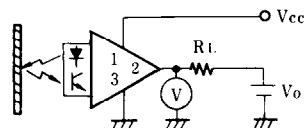
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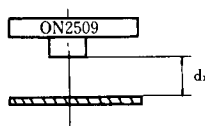
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* 4

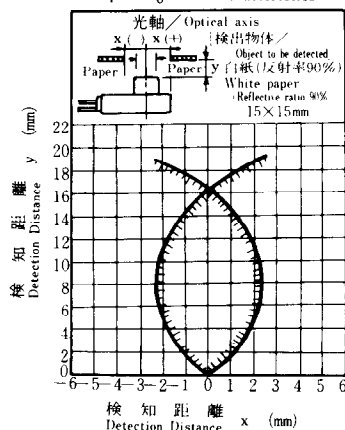


* 5



検出対象ペーパー Paper to be detected
 普通紙・OHPシート Ordinal paper・OHP sheet
 トレーシングペーパー tracing paper
 (紙質35GSM以上) (paper quality is more than 35GSM)

(1)
動作領域特性
Operating Area Characteristics



(2)
動作領域特性
Operating Area Characteristics

