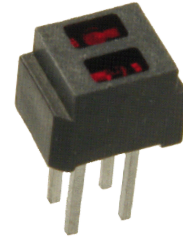


Reflective Object Sensor

OPB606A, OPB606B, OPB606C
OPB607A, OPB607C

Obsolete (OPB607B)



Features:

- Choice of phototransistor (OPB606) or photodarlington (OPB607) output
- Unfocused for sensing diffuse surface
- Low cost plastic housing
- Filtered (OPB606, OPB607)

Description:

OPB606 consists of an infrared Light Emitting Diode (LED) and an NPN silicon phototransistor which are mounted “side-by-side” on parallel axes in a black opaque plastic housing.

The **OPB607** consists of an infrared Light Emitting Diode (LED) and an NPN silicon photodarlington which are mounted “side-by-side” on parallel axes in a black plastic housing.

The emitting diode and phototransistor of both the **OPB606** and **OPB607** are encapsulated in a filtering epoxy that reduces ambient light noise. On both models, the phototransistors respond to radiation from the emitter only when a reflective object passes within the field of view.

Custom electrical, wire and cabling and connectors are available. Contact your local representative or OPTEK for more information.

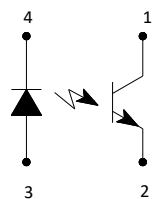
Applications:

- Non-contact reflective object sensor
- Assembly line automation
- Machine automation
- Machine safety
- End of travel sensor
- Door sensor

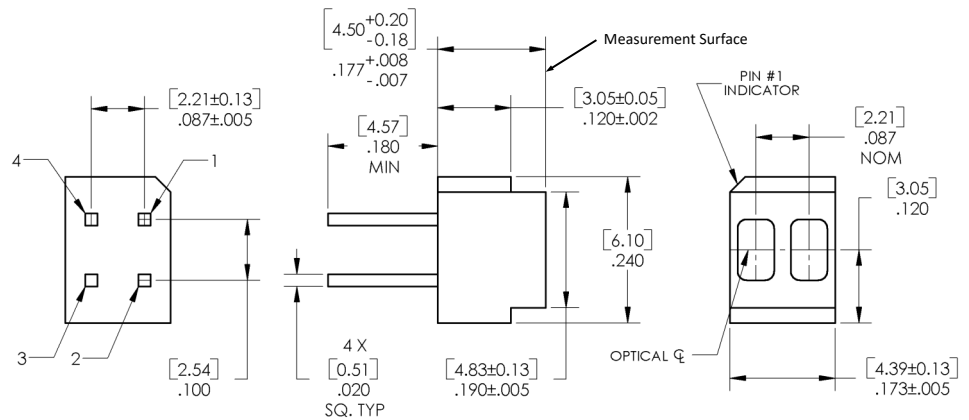
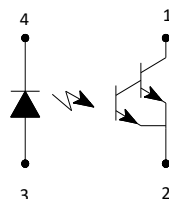
Pin #	LED	Pin #	Transistor
4	Cathode	1	Collector
3	Anode	2	Emitter

Ordering Information				
Part Number	LED Peak Wavelength	Sensor	Typical Reflection Distance Inch (mm)	Lead Length
OPB606A	935 nm	Transistor	0.050" (1.27 mm)	0.18" (Min)
OPB606B				
OPB606C				
OPB607A		Darlington		
OPB607B Obsolete				
OPB607C				

OPB606



OPB607



RoHS

DIMENSIONS ARE IN:

[MILLIMETERS]
INCHES

CONTAINS POLYSULFONE

To avoid stress cracking, we suggest using ND Industries' **Vibra-Tite** for thread-locking. **Vibra-Tite** evaporates fast without causing structural failure in OPTEK's molded plastics.

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

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Electrical Specifications

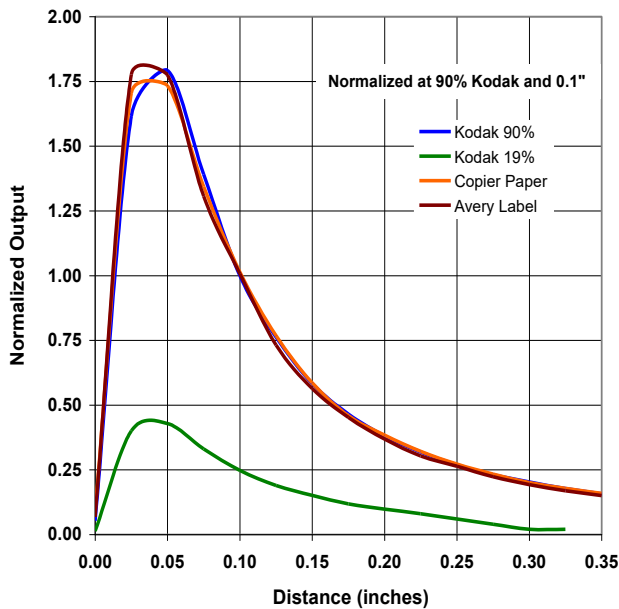
Absolute Maximum Ratings ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Storage & Operating Temperature Range	-40° C to +85° C
Lead Soldering Temperature [1/16 inch (1.6 mm) from the case for 5 sec. with soldering iron] ⁽¹⁾	260° C
Input Diode	
Forward DC Current	50 mA
Peak Forward Current (1 μs pulse width, 300 pps)	3 A
Reverse DC Voltage	2 V
Power Dissipation ⁽²⁾	75 mW
Output Phototransistor (OPB606) / Output Photodarlington (OPB607)	
Collector-Emitter Voltage OPB606A, OPB606B, OPB606C OPB607A, OPB607C	30 V 15 V
Emitter-Collector Voltage	5 V
Collector DC Current OPB606A, OPB606B, OPB606C OPB607A, OPB607C	25 mA 125 mA
Power Dissipation ⁽²⁾	75 mW

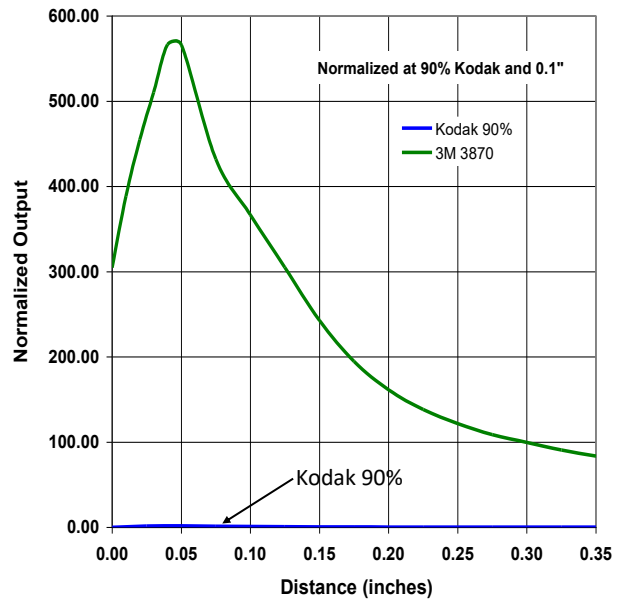
Notes:

- (1) RMA flux is recommended. Duration can be extended to 10 seconds maximum when flow soldering.
- (2) Derate linearly 1.25 mW/° C above 25° C.

OPB606 - Output vs Distance



OPB606 - Output vs Distance (Retro)



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