

# Reflective Object Sensor

OPB703 through OPB705,  
OPB703WZ through OPB705WZ,  
OPB70AWZ through OPB70HWZ



## Features:

- Phototransistor output
- High sensitivity
- Low-cost plastic housing
- Available with lenses for dust protection and ambient light filtration
- Focused for maximum sensitivity

## Description:

The **OPB703**, **OPB704** and **OPB705** consist of an Infrared (890nm) Light Emitting Diode (LED) and a NPN silicon Phototransistor, mounted side-by-side on converging optical axes in a black plastic housing and are designed for PCBoard mounting. The **OPB703WZ**, **OPB704WZ**, **OPB705WZ** and **OPB70BWZ** are designed for remote mounting utilizing interconnect wires of UL approved 26 AWG, 24" (61.0cm) minimum length, stripped and tinned.

The **OPB70AWZ** consists of an Infrared (890nm) Light Emitting Diode (LED) and a NPN silicon Photodarlington, mounted side-by-side on converging optical axes in a black plastic housing and is designed for remote mounting utilizing interconnect wires of UL approved 26 AWG, 24" (61.0cm) minimum length, stripped and tinned.

The **OPB70CWZ through OPB70FWZ** consist of a Visible (Red 640nm) Light Emitting Diode (LED) and a NPN silicon Phototransistor or Rbe Phototransistor, mounted side-by-side on converging optical axes in a black plastic housing and are designed for remote mounting utilizing interconnect wires of UL approved 26 AWG, 24" (61.0cm) minimum length, stripped and tinned.

Various lens options are available: No lens for the (**OPB703**, **OPB703WZ**), blue window for dust protection for the (**OPB704**, **OPB704WZ**, **OPB70BWZ**, **OPB70HWZ**) and aperture lens for improved resolution for the (**OPB705**, **OPB705WZ**, **OPB70AWZ**, **OPB70CWZ**, **OPB70DWZ**). The **OPB704G** and **OPB704GWZ** offers excellent protection for dirty environments.

The phototransistor responds to illumination from the emitter when a reflective object passes within the field of view centered typically at 0.15" (3.8 mm).

Custom electrical, wire, 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
- Mark Detection
- Office Equipment



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.

### Ordering Information

Part	LED Peak	Detector	Optical Cover	Lead or Wire		
<b>OPB703</b>	890 nm	Transistor	None	0.160" Leads		
<b>OPB703WZ</b>				24" / 26 AWG Wire		
<b>OPB704</b>			Blue Window	0.160" Leads		
<b>OPB704WZ</b>				24" / 26 AWG Wire		
<b>OPB70HWZ</b>				24" / 26 AWG Wire		
<b>OPB704G</b>				0.160" Leads		
<b>OPB704GWZ</b>			24" / 26 AWG Wire			
<b>OPB705</b>			640 nm	Darlington	Aperture	0.160" Leads
<b>OPB705WZ</b>						24" / 26 AWG Wire
<b>OPB70AWZ</b>				Rbe Transistor	Blue Window	
<b>OPB70BWZ</b>	Aperture					
<b>OPB70CWZ</b>		Rbe Transistor		Aperture		
<b>OPB70DWZ</b>					Transistor	
<b>OPB70EWZ</b>		Rbe Transistor		Clear Window		
<b>OPB70FWZ</b>	Transistor					

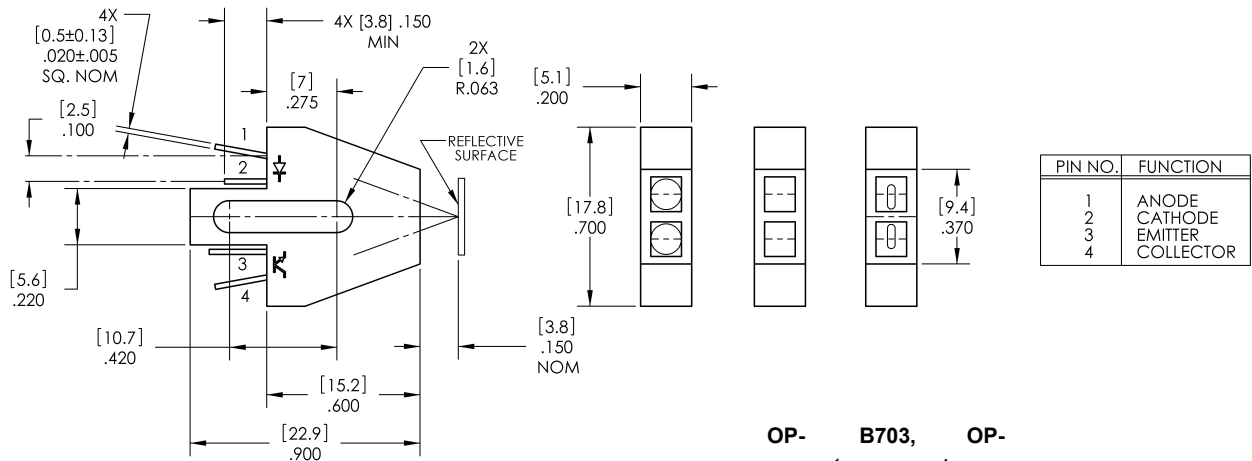
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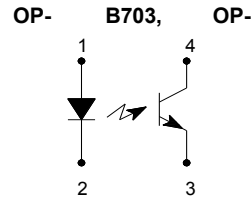
OPB703 through OPB705,  
OPB703WZ through OPB705WZ,  
OPB70AWZ through OPB70HWZ



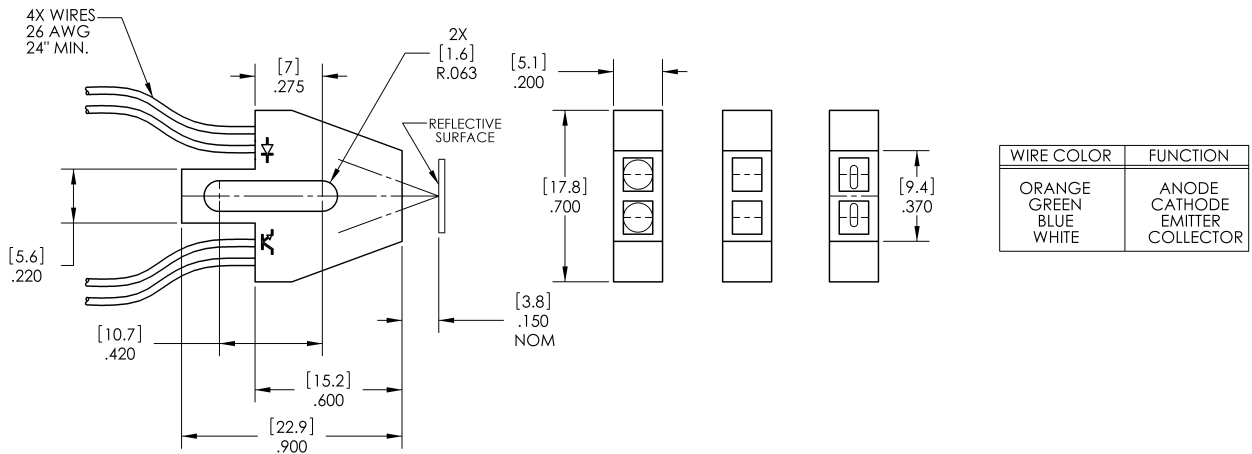
## OPB703, OPB704, OPB705



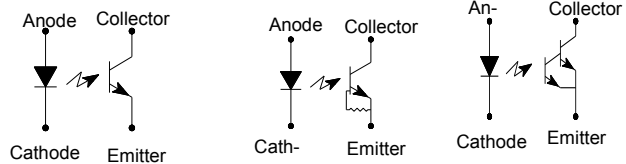
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TOLERANCES ARE ± .010 UNLESS OTHERWISE SPECIFIED.



## OPB703WZ, OPB704WZ, OPB705WZ, OPB70AWZ, OPB70BWZ, OPB70CWZ, OPB70DWZ



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