Photologic® Slotted Optical Switch

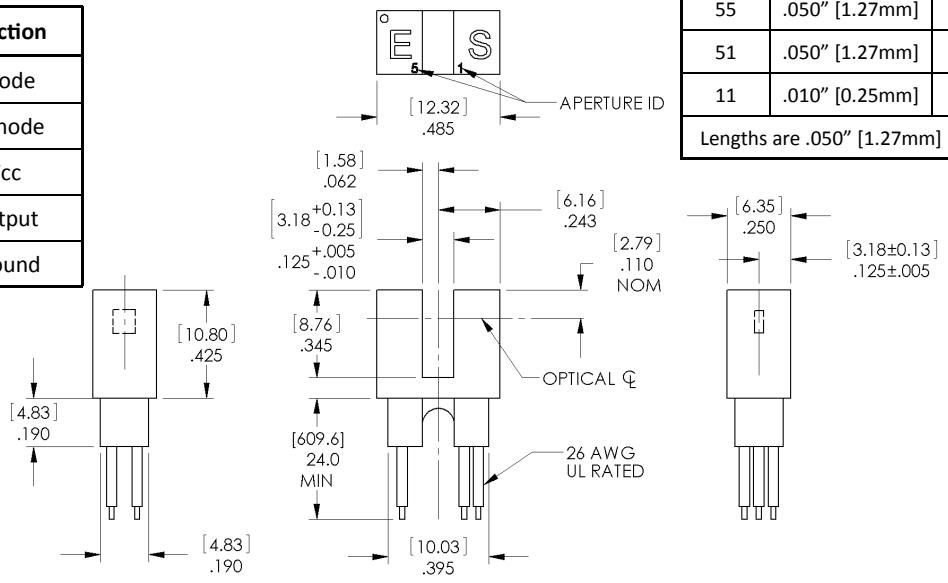
OPB960, OPB970, OPB980, OPB990 Series

PACKAGE OUTLINE for OPB980 and OPB990 Series

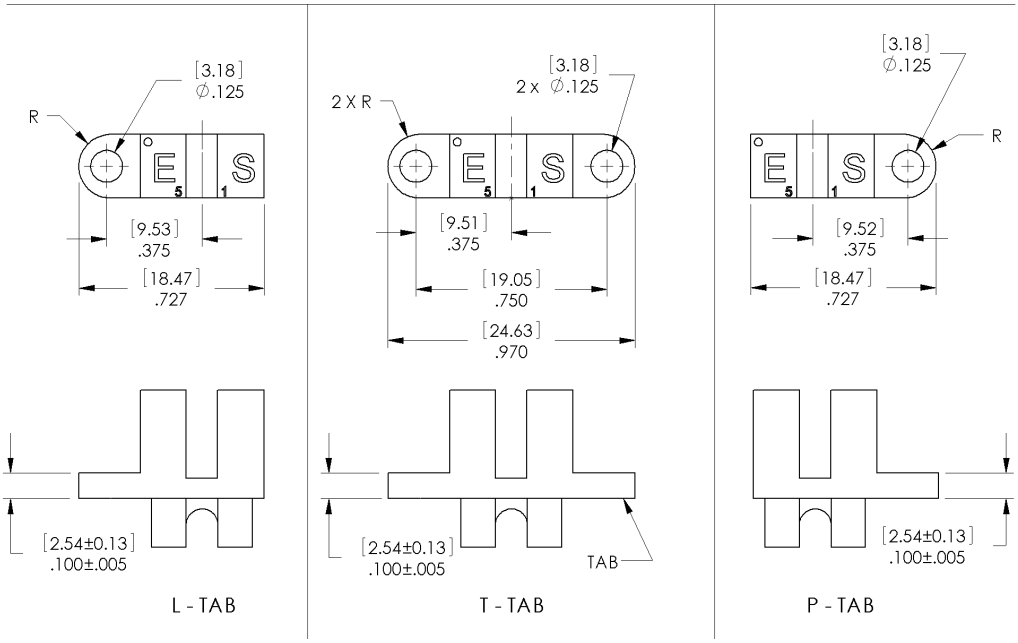
TABLE 2

Wire Color	Function
Red	Anode
Black	Cathode
White	Vcc
Blue	Output
Green	Ground

APERTURE WIDTH GUIDE		
CODE	LED	SENSOR
55	.050" [1.27mm]	.050" [1.27mm]
51	.050" [1.27mm]	.010" [0.25mm]
11	.010" [0.25mm]	.010" [0.25mm]
Lengths are .050" [1.27mm]		



DIMENSIONS ARE IN INCHES AND [MILLIMETERS].
TOLERANCES ARE ± .010 [0.25]



Notes:

(7) Wire is 26AWG, UL Rated PVC insulation.

(8) Ideal torque for bolt or screw 0,45 to 0,68 Nm (4 to 6 Lb-in).

(9) When using a thread lock compound, ND Industries "ND Vibra-Tite® Formula 3" will avoid stress cracking plastic.

(10) Plastic is soluble in chlorinated hydrocarbons and ketones. Methanol or isopropanol are recommended as cleaning agents.

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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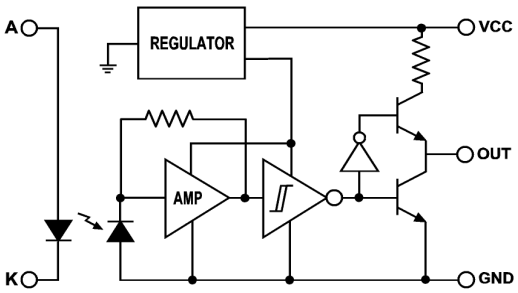
Absolute Maximum Ratings (T_A = 25° C unless otherwise noted)	
Storage Temperature Range	-40°C to +85° C
Operating Temperature Range	-40°C to +70° C
Input Diode (E)	
Input Diode Power Dissipation	100 mW (11)
Input Diode Forward D.C. Current, T_A = 25°C	40 mA (14)
Input Diode Reverse D.C. Voltage, T_A = 25°C	2 V
Sensor (S)	
Supply Voltage (V_{CC} to Ground)	18 V (13)
Output Photologic® Power Dissipation	200 mW (12)
Voltage at Output Lead (Open-Collector Output), T_A = 25°C	35V
Short Circuit Output Current to Ground (I_{OS}) 1 sec Max.	30 mA

Notes:

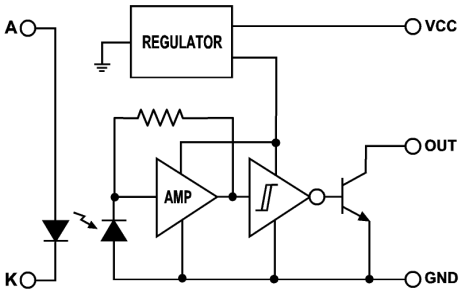
(11) Derate linearly 2.22 mW / °C above 25° C.
(12) Derate linearly 4.44 mW / °C above 25° C.
(13) Prior to 2004 Vcc was limited to 5.5V maximum.
(14) Do not connect input diode directly to a voltage source without an external current limiting resistor.

Block Diagram

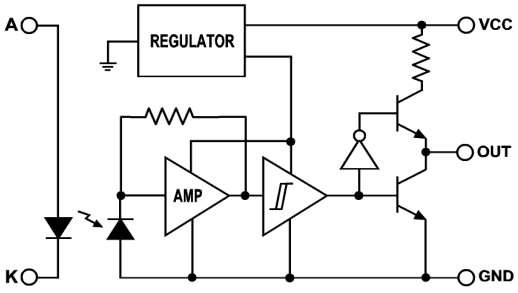
Buffer Totem-Pole
OPB960/ OPB970/ OPB980/ OPB990



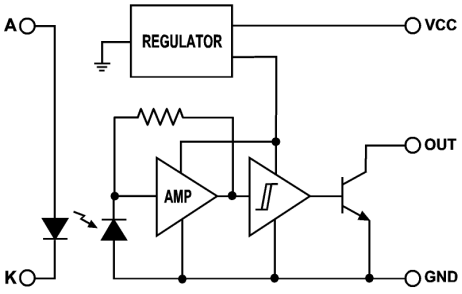
Buffer Open-Collector
OPB961/ OPB971/ OPB981/ OPB991



Inverter Totem-Pole
OPB962/ OPB972/ OPB982/ OPB992



Inverter Open-Collector
OPB963/ OPB973/ OPB983/ OPB993



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